



UNITED STATES MARINE CORPS

MARINE CORPS BASE
PSC BOX 20004
CAMP LEJEUNE, NORTH CAROLINA 28542-0004

BO P4790.1C
BLOG
AUG 22 1997

BASE ORDER P4790.1C

From: Commanding General
To: Distribution List

Subj: STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

Encl: (1) LOCATOR SHEET

1. Purpose. To establish Marine Corps Base maintenance management policy and procedures in accordance with MCO P4790.2.

2. Cancellation. BO P4790.1B.

3. Summary of Revision. This Manual has been reformatted per Appendix A of MCO P4790.2 and contains major changes as follows:

a. Chapter 1. The introduction to maintenance management has been incorporated in Chapter 1.

b. Paragraph 1000.5. Describes maintenance priorities.

c. Figure 1-1. Depicts the format to be used for a cover letter for turnover file/desk top procedures.

d. Paragraph 2000.4f. Describes echelons of maintenance authorized for Base units by commodity area.

e. Paragraph 2007.5. Provides the policy relative to automated reports produced by the Marine Corps Integrated Maintenance Management System Automated Information System, (MIMMS/AIS).

f. Paragraph 2009.3n. Outlines new requirements for scheduling annual validation checks for Test, Measurement and Diagnostic Equipment (TMDE).

g. Paragraph 2011. Discusses recognition of performance. This is a new paragraph.

h. Paragraph 2012. States commodity personnel assignment policy.

i. Figure 2-1. Provides a sample letter of authorization for personnel to sign Equipment Repair Orders (ERO's)/Equipment Repair Order Shopping Lists (EROSL's).

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j. Figure 2-2. Provides a sample letter of authorization for personnel to receipt for material and equipment at the Intermediate Maintenance Activity.

k. Figure 2-3. Provides MIMMS Transaction Access Utility List.

l. Figure 2-4. Provides an example for submission of an RM4 Remark via Data Entry.

m. Figure 2-5. Provides examples of standardized RM4 Remarks.

n. Paragraph 3000.1d. Addresses the procurement of class IX repair parts through the Sassy Management Unit (SMU) for units possessing tactical equipment and authorized reimbursable accounts with the SMU. Additionally, provides information concerning assignment of Force/Activity Designator (F/AD) for Base units.

o. Paragraph 3002.1b. Outlines new guidance relative to Pre-expended Bin (PEB) stockage criteria.

p. Paragraph 3002.1i. Provides policy describing retention/authorization of broken units of issue (U/I) for repair parts.

q. Paragraph 3005. Addresses Mount Out. Not Applicable to Base units.

r. Paragraph 3006.2a. Provides policy relative to validation/reconciliation procedures for units supported by the Field Maintenance SubSystem (FMSS).

s. Paragraph 3007.3. Outlines new requirements/intervals for inventory of tools.

t. Paragraph 3007.5. Provides new policy for establishment/accountability of locally authorized tool kits.

u. Figure 3-1. Provides sample letter requesting authorization for cannibalization/selective interchange.

v. Figure 3-2. Provides sample letter authorizing personnel to receipt from and reconcile with Maintenance Float.

w. Figure 3-3. Provides sample of a Maintenance/Supply Worksheet.

y. Paragraph 4002. States policy on field training.

x. Paragraph 4001.5c. Provides instructions for submission of nominees to attend II MEF MIMMS School at 2d Force Service Support Group.

z. Paragraph 4003. This paragraph has been renamed from "On the Job Training" to "Initial Skill Training (IST) and Skill Progression Training (SPT)."

aa. Paragraph 5001. Provides policy/information on formal inspections.

bb. Paragraph 5002. Provides information on informal inspections.

cc. Paragraph 5004. Provides policy/information on Field Supply Maintenance Analysis Office (FSMAO) analysis.

dd. Paragraph 5005. Provides policy/information on preparation for inspection, reports by inspectors and retention/submission of inspection reports by units analyzed.

ee. Paragraph 5006. Provides policy on correction of discrepancies noted during analyses/inspections.

ff. Paragraph 6003. Provides information on the storage, control and security of maintenance facilities.

gg. Chapter 8. The below listed programs have been moved to the following new locations:

<u>Program</u>	<u>Old Location</u>	<u>New Location</u>
Modification Control Program	Paragraph 8001	Paragraph 2008
Calibration Control Program	Paragraph 8002	Paragraph 2009
Quality Control and Quality Assurance	Paragraph 8005	Paragraph 5007
Engineer Equipment Repair Criteria	Paragraph 8006	Paragraph 8002

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(1) "Garrison Mobile (Engineer) Equipment Program" and "Garrison Mobile (Material Handling and Automotive) Equipment Program" have been deleted and combined in paragraph 8006 of this Manual, entitled "Garrison Mobile Equipment Program".

(2) The following new programs have been included in this Manual:

<u>Program</u>	<u>Location</u>
Joint Oil Analysis Program	Paragraph 8007
Civilian/Military Beneficial Suggestion Program	Paragraph 8010
Corrosion Prevention and Control Program	Paragraph 8008

4. Recommendations. Recommendations for changes to this Manual are invited. Submit proposed changes via the appropriate chain of command for evaluation.

5. Certification. Reviewed and approved this date.


B. A. GOMBAR
Chief of Staff

DISTRIBUTION: A

BO P4790.1C
AUG 22 1997

LOCATOR SHEET

Subj: STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

Location: _____
(Indicate location(s) of copy(ies) of this Manual.)

ENCLOSURE (1)

BO P4790.1C
AUG 22 1997

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Person Incorporated Change

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

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STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

CHAPTER 1

GENERAL INFORMATION

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STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

CHAPTER 1

GENERAL INFORMATION

1000. INTRODUCTION TO MAINTENANCE MANAGEMENT

1. Purpose. This Manual provides policies, procedures and instructions for the implementation and administration of maintenance management within Marine Corps Base, Camp Lejeune.

2. Status and Scope

a. Requirements in this Manual are applicable to all Marine Corps Base, Camp Lejeune organizations.

b. Any deviation from instructions contained in this Manual must be authorized by the Commanding General, Marine Corps Base, Camp Lejeune (Assistant Chief of Staff, Logistics).

c. This Manual contains instructions for the implementation and administration of maintenance management procedures.

3. Marine Corps Integrated Maintenance Management System (MIMMS)

a. Marine Corps Order P4790.1, MIMMS Introduction Manual, and Marine Corps Order P4790.2, MIMMS Field Procedures Manual establishes the policies and procedures for the management of ground equipment maintenance in the Marine Corps. The objective of MIMMS is to establish a uniform maintenance management system for all ground equipment, which includes but is not limited to communications, engineer, general supplies, motor transport, ordnance, audio-visual, NBC and selected plant account equipment, and supports the accomplishment of Marine Corps Base unit missions.

b. This Manual provides a comprehensive guide for the performance and management of ground equipment maintenance within Marine Corps Base, Camp Lejeune organizations, establishes command and staff relationships for equipment maintenance programs, identifies equipment maintenance and maintenance management functions, provides procedures, assigns responsibilities to appropriate organizations, and identifies relationships between MIMMS and other maintenance related Marine Corps programs.

4. For the purpose of implementation of MIMMS at this Command, the term "Organization" as used in this Manual shall be considered synonymous with "school, department, division, unit and battalion," and the term "Commander" synonymous with "Assistant Chief of Staff, Base Facilities Maintenance Officer, Base MTO/GME Fleet Manager, Base Property Control Officer and Commanding Officer."

5. Priorities. To achieve a high state of equipment readiness and extract maximum effectiveness from the maintenance and supply system, it is necessary to establish clear maintenance priorities, in order of importance reflected below:

- a. The repair of deadlined mission essential equipment.
- b. The procurement of repair parts, tools and publications.
- c. The timely flow of equipment through the maintenance cycle.

d. The establishment and maintenance of accurate records to be used for future management decisions.

6. Applicability

a. Procedures established herein are applicable to all equipment listed in the Equipment Allowance File (EAF), and the garrison mobile equipment listed in MCO P11240.106. Also included is commercial type equipment owned by the Government, on which second echelon or higher maintenance is authorized.

b. Specifically excluded from the provisions of this Manual are appliances used in government quarters, field printing equipment, and non-tactical food service equipment.

1001. COMMAND RESPONSIBILITIES

1. The requirement to maintain material in a condition to perform its assigned function is an essential responsibility of the commander. Each commander shall personally ensure that a sound and continuing equipment maintenance program exists within the organization and that proper maintenance procedures are followed per applicable directives. Commanding officers of all Base organizations are responsible for implementation of, and adherence to the policies, procedures and instructions contained in this Manual.

2. To ensure that an effective equipment maintenance program is established and implemented, commanders must:

a. Provide necessary guidance in the formulation of standing operating procedures, desk-top procedures and turnover folders.

b. Ensure that the necessary tools, test, diagnostic and measuring equipment (TMDE), publications, personnel, supplies, and facilities are available and used properly.

c. Assign responsibilities to individuals to accomplish necessary maintenance and associated documentation.

d. Allocate sufficient time to accomplish required maintenance.

e. Provide necessary technical training to enable assigned personnel to accomplish the maintenance mission.

f. Provide the impetus for the program through an active, continuing and visible display of command emphasis and genuine interest. The establishment, support and maintenance of a viable internal review/inspection program is critical to the maintenance and supply efforts and preventing occurrences of waste and abuse.

g. Assign in writing a Maintenance Management Officer as required.

h. Conduct periodic working inspections of maintenance activities.

i. Ensure authorized echelons of maintenance in current Tables of Organization (T/O's) are not exceeded without prior approval of the Commanding General, Marine Corps Base, Camp Lejeune (Assistant Chief of Staff, Logistics).

j. Ensure all requirements and programs which have been implemented remain current and pertinent.

3. Subordinate organizational commanders shall advise their senior commanders of any equipment maintenance problems which cannot be resolved through normal channels and procedures.

4. Requirement for a Maintenance Management Officer

a. Units, to include detached or separate commands, which are authorized second echelon or higher maintenance capability for more than one commodity area, shall assign an Officer, Staff Noncommissioned Officer (SNCO), or civilian as appropriate, in writing, as the Maintenance Management Officer (MMO) to provide supervision over equipment maintenance. In units that do not meet the above criteria, the individual designated as the commodity manager shall perform the maintenance management functions and need not be assigned as the MMO. These responsibilities may be assigned as an additional duty for an officer/civilian or as a primary duty for a SNCO when a full-time officer assignment is not required. MCO P4790.1 and MCO P4790.2 apply.

b. Assignment of MMO's to organizations below the base level will be accomplished in writing by commanders maintaining equipment to which this Manual is applicable. A copy of the appointing order/letter shall be submitted to the (Commanding General, Assistant Chief of Staff, Logistics (MMO)) upon initial appointment and on each occasion when a new MMO is appointed. The Base MMO will maintain a file of appointment orders/letters on all current organizational MMO's.

1002. STAFF RESPONSIBILITIES

1. Assistant Chief of Staff, Manpower (AC/S, Manpower). Serves as the principal Base Staff Officer pertaining to military personnel management, including the assignment and replacement of maintenance and maintenance management personnel.

2. Assistant Chief of Staff, Training, Education and Operations (AC/S, TE&O)

a. Serves as the principal Base Staff Officer on matters pertaining to formal training, including equipment maintenance training.

b. Coordinates with the Base MMO and the Civilian Personnel Director (CPD) on the training of maintenance and maintenance management personnel.

3. Assistant Chief of Staff, Logistics (AC/S, Logistics)

a. Serves as the principal Base Staff Officer on matters pertaining to logistics including those matters relating to equipment maintenance.

b. Coordinates the logistics functions for all Base organizations to include all commodity areas.

c. Exercise staff cognizance over the Base Maintenance Management Program.

4. Assistant Chief of Staff, Comptroller (AC/S, Comptroller)

a. Serves as the principal Base Staff Officer on matters pertaining to internal control, guidance and management of appropriated funds.

b. Periodically evaluates direction over budgeting, accounting, and expenditure of funds; provides technical guidance, coordination, and advice on matters pertaining to efficient utilization of appropriated funds.

5. Base Adjutant

a. Manages the directives control program and inspects/assists base organizations with proper directives control procedures

b. Assists the MMO to ensure correct administrative procedures are used within commodity area directive systems.

6. Civilian Personnel Director (CPD)

a. Serves as a special staff assistant to the Commanding General under the cognizance of the Chief of Staff, with respect to civilian personnel matters.

b. Advises and gives direct assistance in obtaining available training for equipment maintenance personnel for skills progression training (SPT) and for off station training classes for updating skills.

c. Provides supervisory training requirements for management and provides advice regarding travel and related funds for civilian employees.

7. Base Safety Officer (BSafO)

a. Serves as a special staff officer to the Commanding General under the staff cognizance of the Assistant Chief of Staff, Installation Security and Safety with respect to matters dealing with safety.

b. Coordinates with the Base MMO on all safety aspects of equipment maintenance operations.

8. Base Maintenance Management Officer (MMO)

a. The Marine Corps Base, Camp Lejeune MMO will be assigned as a Special Staff Officer under the cognizance of the Assistant Chief of Staff, Logistics. Assignment of the Base MMO will be made in writing with a copy of the appointing letter retained in the office of the Assistant Chief of Staff, Logistics.

b. Serves as a special staff officer to the Commanding General, under the staff cognizance of the Assistant Chief of Staff, Logistics, on all matters pertaining to organizational and support equipment maintenance management.

c. Advises the Commanding General on all matters related to equipment maintenance and the impact of the Base Maintenance Management efforts on equipment readiness.

d. Plans, organizes and coordinates the use of all equipment maintenance activities and resources.

e. Prepares the Base's Maintenance Management Standing Operating Procedures (MMSOP).

f. Coordinates and assists commodity maintenance officers in establishing maintenance production and quality control programs, and centrally coordinates the Base Product Quality Deficiency Report (PQDR) program.

g. Initiates action to correct or change technical publications in accordance with current directives, ensures that required allowances of currently effective technical publications are on hand and properly distributed and that personnel are trained in their use.

h. Monitors the MIMMS Program to ensure timely and accurate maintenance related report submissions.

i. Plans and implements* assistance visits for the Commanding General to assess the effectiveness of the maintenance effort.

j. Monitors proper recording and upkeep of maintenance information in maintenance records.

k. Coordinates the overall conduct of the Base's equipment maintenance program.

9. S-4 Officer

a. Serves as the principle staff officer to the commanding officer on all matters pertaining to logistics, to include equipment maintenance, its management and the availability of maintenance resources.

b. Coordinates a sound and viable internal review program, particularly for those functional areas vulnerable to fraud, waste and abuse.

c. Exercises staff cognizance over the organization's MMO on matters pertaining to maintenance and/or maintenance management.

10. Unit Maintenance Management Officer (MMO)

a. Serves as a special staff officer to the commanding officer on all matters pertaining to maintenance management.

b. Advises the commanding officer on all matters related to equipment maintenance and the impact on readiness.

c. Develops and manages the unit's maintenance management program, to include coordination of limited technical inspections (LTI's) and maintenance stand downs (MSD's).

d. Provides technical assistance and instructions to subordinate commanders, OIC's and/or section heads in maintenance management matters.

e. Prepares, updates and revises the organization's MMSOP.

f. Assists subordinate commanders, OIC's and/or section heads in establishing quality assurance (QA) and maintenance production programs, to include active participation in a viable internal review program.

g. Centrally coordinates the organization's Product Quality Deficiency Reports (PQDR), Replacement and Evaluation (R&E), Repair and Return (R&R), modification, calibration, technical publications and corrosion control programs.

h. Initiates action to correct or change technical publications (NAVMC 10772) and ensures that required maintenance publications are on hand, on order, and/or properly distributed.

i. Has staff responsibility for the operation and functioning of MIMMS within the respective areas of responsibility.

j. Identifies facility requirements for maintenance operations and training, and coordinates the use of available facilities.

k. Reviews Table of Equipment (T/E) modification of allowances (MOA's) against the Table of Organization (T/O) for maintenance supportability.

l. Plans and coordinates the quarterly inspection schedule to ensure the effectiveness of the maintenance effort.

m. Evaluates organizational support and test equipment allowances, and ensures that on hand equipment is properly maintained, inventoried and calibrated.

n. Ensures that procedures are developed, implemented and followed through for coordinating maintenance support with the Intermediate Maintenance Activity.

o. Ensures the proper recording of maintenance information and upkeep of required maintenance resource records.

p. Coordinates with the S-1 and S-4 regarding personnel assignments.

q. Coordinates with the S-3 and S-4 regarding technical training of maintenance personnel and balancing of operational requirements and maintenance scheduling.

r. Coordinates with the supply officer in regards to repair parts and other supply support requirements and ensures a bi-weekly reconciliation/validation is accomplished by commodity managers and the Supply Officer.

s. Assists in the budget process and identifies maintenance funding requirements.

t. Monitors the organization's administrative deadline program.

u. Coordinates the overall conduct of the equipment maintenance program.

v. Conducts an annual review of the T/O and advises the commanding officer and the S-1 on recommended changes.

11. Commodity Manager

a. Manages the performance of equipment maintenance operations (to include contracted maintenance) in the commodity to which assigned.

b. Acts as the technical advisor to the commanding officer on all commodity functions.

c. Plans maintenance production and preventive and corrective maintenance based on the echelon of maintenance authorized and resources available.

d. Schedules, directs and supervises the care, inspection and maintenance of assigned T/E and commercial equipment.

e. Monitors support and test equipment allowances and ensures on hand equipment is properly maintained, inventoried and calibrated.

f. Initiates action to correct or change technical publications, ensures required allowances of technical publications are on hand, and responsible personnel are instructed in their use and maintenance.

g. Ensures all maintenance information is recorded and maintenance resource records are properly maintained.

h. Ensures the proper training and use of assigned operators, maintenance and supervisory personnel.

i. Coordinates with the supply officer regarding all supply support matters.

j. Supervises all validations and reconciliations to include daily and weekly internal shop validations, bi-weekly external reconciliations with the Intermediate Maintenance Activity and Repairable Issue Point (when applicable) and bi-weekly parts reconciliations with supply.

k. Assists in the organization's budget process by identifying maintenance funding requirements.

l. Establishes and manages the calibration control procedures and commodity manager's modification records.

m. Establishes sound maintenance production, preventive maintenance (PM) and quality assurance programs.

n. Ensures that maintenance personnel have a valid operator's license for the equipment requiring maintenance.

o. Prepares SOP's for maintenance operations within the commodity when unit's MMSOP does not adequately outline those procedures.

p. Evaluates the serviceability of equipment per the internal quality assurance plan.

12. Supply Officer

a. Serves as a special staff officer to the commanding officer with respect to general supply matters, including supply support for the organization's maintenance program.

b. Coordinates with the MMO, commodity officers and supporting activities pertaining to supply support of T/E and commercial equipment.

1003 STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

- c. Administers the organizational supply program in support of maintenance operations and conducts bi-weekly reconciliation's.
- d. Submits accurate and timely supply data into the supply system for all supply items.
- e. Reconcile the LM-2, MAL and EAF monthly with the MMO.
- f. Maintains a library of supply publications in support of all maintenance and maintenance management functions.
- g. Ensures that appropriated funds are available to support maintenance operations and reviews justifications for all financial obligations.
- h. Recommends allocation of funds based on projected operational requirements and makes any required financial adjustments based on actual obligations.
- i. Ensures all type I allowances are on hand, on order, or identified as unfunded deficiencies, when appropriate.

1003. STANDING OPERATING PROCEDURES (SOP's)

1. Need for Uniform Procedures. Maintenance and maintenance management SOP's are required to establish the commander's policy, assign responsibility for certain tasks, and document standardized procedures to be followed in those areas where standardization is possible. SOP's provide for the orderly accomplishment of assigned tasks and ensure continuity of operations. Organizational SOP's should expand, as necessary, on the general guidelines established in publications and directives issued by higher authority and adapt those guidelines to the peculiarities of the activity.
2. Requirement for Maintenance Management SOP's
 - a. Commanders of organizations authorized second echelon or higher maintenance capability for more than one commodity area will publish MMSOP's except when maintenance procedures are adequately covered in the Base MMSOP. In such cases the Base MMSOP may be used in lieu of the unit MMSOP.
 - b. Commanders of organizations authorized second echelon or higher maintenance capability for only one commodity area will publish maintenance management procedures in either a commodity maintenance/unit logistics standard operating procedures (SOP) or the MMSOP except when maintenance procedures are adequately covered in the Base MMSOP.
 - c. Commanders of those organizations which possess ground equipment on their organic property accounts, or are assigned selected equipment for their use from another Base organization, but are not authorized maintenance beyond first echelon, will publish the command's policy and procedures for preventive maintenance, modification records, and procedures for evacuating the equipment to a supporting maintenance organization aboard the Base, except when the policy and procedures are adequately covered in the Base MMSOP. These policies and procedures may be published as part of one of the unit's logistics SOP's or in a maintenance policy letter for the unit's commodity areas.

d. Appendix A of MCO P4790.2 sets forth the minimum requirements which must be addressed in the maintenance management SOP.

e. A current copy of each organization's SOP will be forwarded to the Base MMO.

1004. DESK-TOP PROCEDURES (DTP's) AND TURNOVER FILES (TOF's)

1. Requirement

a. Standing Operating Procedures (SOP's) assign responsibilities for certain tasks and provide guidance for their accomplishment. However, SOP's do not provide the detailed information necessary for day-to-day accomplishment of the tasks. DTP's/TOF's provide the who, what, where, when, why, and how information required to perform the assigned function. Proper use of DTP's/TOF's will alleviate the adverse results which are caused by the temporary absence or the transfer of personnel, i.e., lack of expertise and continuity in day-to-day operations.

b. DTP's will be prepared for each billet involving administrative and management functions within the equipment maintenance program, to include:

- (1) All personnel tasked with completing the records prescribed by TM 4700-15/1.
- (2) Training non-commissioned officers.
- (3) Technical publications librarians.
- (4) All personnel involved in Blanket Purchase Agreements.
- (5) Shop supply personnel.
- (6) Personnel tasked with input to the Equipment Status Report.
- (7) Toolroom personnel.
- (8) Dispatchers.
- (9) Shop shipping and receiving personnel.
- (10) Quality control inspectors.

c. TOF's will be maintained by all commodity managers and subordinate supervisory personnel.

d. DTP's/TOF's will be continuously reviewed for completeness and updated as required. The following minimum requirements must be accomplished by organizational commanders or their designated representatives:

(1) All DTP's/TOF's will be reviewed and approved as current at least once each twelve months.

(2) When practical, DTP's/TOF's for personnel scheduled for transfer/reassignment will be reviewed and approved as current within 30 days prior to the transfer/reassignment.

(3) The review should be documented as matter of the record within the DTP's/TOF's by the individual and supervisor. A record of review page will be standard in all DTP's/TOF's (figure 1-1).

e. MMSOP's will specify billets for which DTP's/TOF's are required.

2. Minimum List of Items to be Included in DTP's

a. Job assignment.

b. List of current reference material pertaining to the assigned functions.

c. Procedures for carrying out required duties.

d. Telephone numbers of individuals who might need to be contacted.

e. Reports required.

f. Examples of properly completed forms used in assigned functions, to include block by block descriptions in accordance with the local SOP.

3. Items to be Included in TOF's

a. Title of the billet.

b. Primary and collateral duties.

c. To whom the individual occupying the billet reports and incumbent billets subordinate thereto.

d. Mission of the billet (broad billet responsibilities).

e. Functions involved in accomplishing the mission (principal action taken).

f. Location and list of current SOP's and inspection checklists, and previous inspection reports and results.

g. Tasks and basic operations regularly performed in accomplishing specific functions.

h. Publications and directives which are pertinent to the billet.

i. Tables of Organization (T/O) cover page.

j. List of required reports and dates of submission, to include letters of authorization.

k. Relationship with activities both in and outside the official chain of command, including official liaison and coordinating functions. Brief statement concerning the type of matters on which these agencies are consulted.

l. Personnel contacts within or outside the command, listing telephone numbers and/or addresses as well as purpose served by contact.

m. Miscellaneous information should be included, e.g., administrative or operational procedures peculiar to the billet, such as dual responsibility for certain functions or limitations in responsibility or authority within particular functions.

n. Short résumé's of past projects considered unusually important, a status report of each pending project, and a brief outline of projects considered worthwhile for future implementation.

*

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

UNITED STATES MARINE CORPS
UNIT
Marine Corps Base
Camp Lejeune, North Carolina 28542

SSIC
ID
(DATE)

MEMORANDUM

From: Communication Officer
To: Individual Concerned

Subj: TURNOVER FILE/DESKTOP PROCEDURES
*
Ref: (a) MCO P4790.2
(b) BO P4790.1

1. Purpose. To establish the policies and procedures for the management of communications within this platoon in accordance with references (a) and (b).

2. Changes

a. You are directed to review and implement the procedures outlined in the references.

b. Changes will be made to this Desktop Procedures/Turnover File whenever deemed necessary and all responsible personnel will be notified.

3. Recommendations. Recommendations concerning this Turnover File/Desktop Procedures are invited. Submit recommended changes to me.

4. Review. These procedures are subject to my review annually. Such review is annotated below.

Date Signature

Date Signature

Date Signature

I. M. BOSS

Figure 1-1.--Sample Cover Letter for Turnover File/Desktop Procedures.

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

CHAPTER 2

MAINTENANCE OPERATIONS

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STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

CHAPTER 2

MAINTENANCE OPERATIONS

2000. MAINTENANCE POLICY

1. The maintenance management policies and procedures of this command are in accordance with the directives of higher headquarters.

2. Units shall accomplish required maintenance on assigned equipment within authorized echelons of maintenance in accordance with applicable orders and technical publications and within the echelon of maintenance authorized on the unit's T/O cover page. Maintenance efforts will be organized with the goal of maintaining the maximum amount of equipment in a ready status.

*

3. Equipment requiring maintenance beyond the organizational echelon of maintenance shall be evacuated to the supporting maintenance facility as per MCO P4790.2_.

4. Maintenance by cannibalization/selective interchange is addressed in paragraph 3002.3 of this Manual.

5. Maintenance Echelons

a. First Echelon Maintenance. First echelon maintenance is performed by the user or operator of the equipment. It includes the proper care, use, operation, cleaning, preservation, lubrication, minor repair, adjustment, testing, and parts replacement as may be prescribed by pertinent technical publications and tools/parts allowances.

b. Second Echelon Maintenance. Second echelon maintenance is that work performed by specially trained personnel in the organization. Appropriate publications authorize second echelon maintenance, additional tools, necessary parts, supplies, test equipment, and skilled personnel to perform maintenance beyond the capabilities and facilities of the first echelon.

c. Third Echelon Maintenance. Third echelon maintenance is that authorized by appropriate publications to be performed by specially trained units in direct support of one or more using organizations. However, third echelon maintenance may be performed by organic maintenance units within the using organization in specially authorized cases. Third echelon maintenance is authorized a larger assortment of parts, subassemblies, assemblies, and more precise tools and test equipment than is provided to using organizations. Organizations authorized to perform third echelon maintenance actions may repair subassemblies, assemblies, and the overflow from the lower echelons within limits imposed by special authorizations of tools, parts, and test equipment. They also support the lower echelons by providing technical assistance, mobile repair crews and repair parts, when necessary.

d. Fourth Echelon Maintenance. Fourth echelon maintenance is performed by units organized as semi-fixed or permanent shops to serve lower maintenance echelons within a geographic area. Fourth echelon maintenance activities are

authorized a larger assortment of assemblies, subassemblies, parts, additional and more precise tools and test equipment than is provided to lower echelons. Organizations authorized to perform fourth echelon maintenance may furnish maintenance contact teams or reinforcing elements to lower echelons, when required. The principal function of fourth echelon maintenance is to repair major items, assemblies and subassemblies for return to the lower echelons or the supply system.

e. Fifth Echelon (Depot Maintenance). Depot maintenance is performed on material requiring major overhaul or complete rebuild of assemblies, subassemblies, end items or parts including the manufacture of parts, modifications, testing, and reclamation, as required. Depot maintenance serves to support lower categories of maintenance by providing technical assistance and performing maintenance beyond their responsibility. Depot maintenance provides stocks of serviceable equipment by using more extensive repair facilities than are available in lower level maintenance activities. Fifth echelon maintenance, synonymous with depot maintenance, is the maintenance authorized for rebuilding major items, assemblies, parts, accessories, tools, and test equipment. It normally supports supply on a scheduled rebuild and return-to-stock basis. Fifth echelon operations are scheduled to employ production and assembly line methods whenever practical.

f. Echelons of Maintenance (EOM) for Marine Corps Base Units

<u>Organization</u>	<u>TAMCN's (Commodity Area)</u>					
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>G</u>
Headquarters and Support Bn *	See Note					
Rifle Range Detachment	3				3/4	
Reserve Support Unit					2	
Field Medical Service School					2	
School of Infantry	3				3	
Marine Corps Service Support Schools				4	2	
Marine Corps Engineer School		4		2	2	

* Note: Elements of H&S Bn are authorized to perform the following levels of equipment maintenance:

- Organizational maintenance (2d echelon) on organic infantry weapons.
- Intermediate maintenance (3d echelon) on audiovisual equipment, training facilities, communications and electronics equipment and assigned tools.

- Intermediate maintenance (4th echelon) on training devices and television and limited 4th echelon maintenance for the repair of integrated circuit boards belonging to audiovisual equipment.

- Intermediate maintenance (4th echelon) on training devices and television and limited 4th echelon maintenance for the repair of integrated circuit boards belonging to audiovisual equipment.

- Limited depot maintenance (5th echelon) on assigned outboard engines to be performed only when formally trained personnel are available.

- Limited depot maintenance (5th echelon) on assigned garrison mobile equipment

g. Authority to perform maintenance and at what level is contained in each unit's Table of Organization (T/O). Requests for authority to exceed the authorized EOM will be submitted to the Commanding General, Marine Corps Base, Camp Lejeune (Assistant Chief of Staff, Logistics). The authority may be granted by the Commanding General, Marine Corps Base, Camp Lejeune for a limited period not to exceed six months. Requests for T/O changes are governed by MCO P5311.1 and should be coordinated with Assistant Chief of Staff, Manpower.

6. The maintenance process and the relationship of maintenance production to information flow as it pertains to equipment status reporting will be standard among all Base organizations performing 2nd echelon or higher maintenance. Appendix F, of MCO P4790.2, will be used as standard procedures for shop supervisors/commodity managers.

7. A detailed inspection of equipment entered into the maintenance cycle, and requisition of known faulty repair parts and components shall be accomplished within the time frame prescribed by MCO P4790.2, from the date the equipment is identified as requiring repairs.

8. Maintenance Shop SOP's will address the maintenance phases and ensure the functions outlined in paragraph 3001 of MCO P4790.2 are accomplished.

9. Commanders and Staff Officers are responsible for their maintenance programs to include preventive maintenance, corrective maintenance, modification of equipment, calibration and limited technical inspections.

2001. ASSIGNMENT OF OPERATORS

1. When feasible, a specific operator/crew will be assigned to principal end items (PEI's) of equipment for the performance of operator maintenance on such equipment. Where necessary, operators may be assigned responsibility for more than one piece of equipment to accomplish this requirement. Commodity managers will maintain a list of all equipment and assigned operators. When responsibility for equipment cannot be assigned to a specific operator, the organizational commander must consider placing that equipment on

administrative deadline. Requirements for equipment considered for administrative deadline are contained in paragraph 3002.11 of MCO P4790.2.

2. Operators will conduct first echelon maintenance on the equipment they are assigned to operate.

3. Operators may operate other than assigned equipment only with the permission of the unit commander, commodity officer or shop chief. This practice is discouraged and will only occur when the assigned operator is not available. The person granting permission will ensure the operator maintenance responsibilities are clearly delineated.

4. Commanders and commodity managers are to ensure that assigned operators are properly trained and possess a valid license.

*

2002. ALLOCATION OF MAINTENANCE TRAINING/PERFORMANCE TIME

1. Individual training skills (ITS) requirements are contained in the 1510 series of MCO's. These requirements must be considered in the allocation of maintenance training time and tasks.

2. Equipment maintenance as well as technical, operator and maintenance supervisor training will receive emphasis equal to that given to operations and training.

3. Commanders will ensure adequate time is allocated for equipment maintenance prior to, during and following operations or training involving the equipment maintenance.

4. Scheduled (preventive maintenance) services will be performed per the appropriate directives and under the control/supervision of qualified personnel.

5. Commanders and commodity supervisors are responsible for the execution of scheduled maintenance, to include a physical modification check of the equipment, record jacket, SL-1-2, modification control records (Form NAVMC 11053, 11054 and 11055) and TI-5600 series publications.

6. Staff sections which provide support to and/or are tasked with accomplishing specific base functions such as motor transport, communications electronics, facilities repair, telephone repair and warehouse operations, must ensure that the work day/week is scheduled to permit adequate time for operator maintenance of the equipment.

2003. SHOP OPERATIONS

1. Shop operations are actions taken to manage maintenance and supply activities, and to control the resources provided to accomplish the unit's mission. Each commander and commodity officer is required to establish an effective shop operation, to include systematic forecasting and scheduling of

equipment maintenance, orderly work flow, safety and a functional quality control program. Appendices E, F and G of MCO P4790.2 provide amplifying guidance for shop supervisors.

2. All areas where maintenance actions will be performed shall be designated in the unit's MMSOP.

3. Commanders and commodity officers will assign in writing the title, authority and responsibilities of key personnel as follows:

- a. Commodity Officer.
- b. Commodity Chief.
- c. Maintenance Officer.
- d. Maintenance Chief.
- e. MIMMS Clerk.
- f. Publications Clerk.
- g. Layette Bin Clerk.
- h. Modifications Control Clerk.
- i. Records Clerk.
- j. Tool Room NCO.
- k. Calibration Clerk.
- l. Quality Control NCO

4. The above letters or orders will be maintained in the designated person's desktop procedures/turnover folder.

5. All maintenance elements will be so organized that maintenance teams are composed of inexperienced personnel working with skilled personnel during active maintenance.

6. Commanders will designate in writing personnel authorized to sign ERO's and associated requisitions/documentation and the priorities for which they are authorized. Use of the priority system is contained in MCO 4400.16, which additionally requires that commanders either personally review or delegate in writing to specific personnel the authority to review all requirements based on Urgency of Need Designator "A", and that this review be accomplished before releasing requisitions to the supply source. The sample letter shown in figure 2-1 may be used for these authorizations.

7. The following procedures will be used for changing priorities on ERO's:

- a. In those cases where the priority is upgraded, a new priority signature and date will be required if the original signer did not have the

authority to assign the upgraded priority. Procedures for upgrading ERO priorities are contained in TM-4700-15/1. The category code of the ERO may have to be upgraded also. The priority of critical parts and/or maintenance will be in agreement with the ERO priority.

b. An ERO priority will be downgraded whenever the priority of maintenance and parts is less than ERO priority. The category code of the ERO may have to be downgraded.

8. Recommend that only one category code "N" ERO per end item be opened at one time. Upgrading and downgrading of category codes will be in consonance with the priority. Use of category code "M" and "X" ERO's is restricted to use by FMF and Base units supported by the FMSS.

9. Commanding officers must ensure that the provisions of paragraph 4003.1 of this Manual are set forth as a mandatory policy during the active maintenance phase.

2004. EQUIPMENT THAT EXCEEDS MAINTENANCE CAPABILITIES

1. Equipment that exceeds a unit's capabilities or authorized echelon of maintenance stated in the mission statement on the cover page of the unit's T/O will be evacuated to the nearest supporting maintenance facility. All maintenance authorized by the unit will be performed prior to evacuation to the supporting maintenance facility. Missing components, accessories and assemblies may be listed on the ERO showing the NSN and valid document number of the missing items. Units requesting maintenance support from the Intermediate Maintenance Activity (IMA) will prepare letters of authorization to sign ERO's (figure 2-1) and provide a list of personnel authorized to receipt for material and equipment from the IMA (figure 2-2). These letters will be updated on an annual basis or as changes occur whichever comes first.

2. The evacuated equipment will be accompanied by supporting equipment documents, i.e., Record Jacket, ERO filled out properly and with a reimbursable Job Order Number in the appropriate (Block 63 - 76 on line 3 of the ERO).

3. Maintenance of commercial equipment shall be in accordance with the manufacturer's procedures. In case of conflict with this SOP, the manufacturer's procedures shall apply. Unit capabilities to repair assigned commercial equipment shall be evaluated by the responsible commander in terms of personnel, test equipment, tools and facilities assigned. Commercial maintenance service contracts may be used to support assigned commercial equipment.

4. When responsibility for a piece of equipment cannot be adequately assigned to an operator or the equipment is level "A" packed, that equipment is administratively deadlined. Level "A" packing is that level of preservation which provides the maximum protection, as outlined in MCO P4030.36. This equipment should be identified and tagged accordingly, and will not be used without the consent of the organizational commander. Requests for placing equipment into a level "A" pack status are to be submitted to the Commanding

General, Marine Corps Base, Camp Lejeune (Assistant Chief of Staff, Logistics) for approval. Preventive maintenance requirements/intervals for equipment administratively deadlined are contained in Chapter 3 of MCO P4790.2.

2005. PERFORMANCE OF MAINTENANCE SERVICES

1. Preventive Maintenance (PM) will be scheduled and is the responsibility of commanders, commodity officers, users and/or operators. Adequate time must be allocated within the training schedule or commitment to complete scheduled maintenance services.

2. First echelon PM's are the responsibility of the assigned operator under the supervision of the commander and/or commodity manager. The foundation of the preventive maintenance program is the operator on the lowest level of maintenance. No one is more familiar with equipment than the individual who uses it. With proper command guidance, indoctrination, and supervision, the operator can materially reduce the deadline rate by using proper procedures in the care and use of the equipment. Command attention and supervision by supervisory personnel at all levels is required to ensure that proper first echelon maintenance procedures are in effect.

3. Second echelon and above PM's are the responsibility of the trained mechanic or technician under the supervision of the maintenance officer. Accomplishment of required PM's is the responsibility of the commander of the organization to which the equipment is assigned. Accordingly, organizational SOP's will establish policies and procedures for that organization's preventive maintenance program. In this regard, Chapter 3 of MCO P4790.2 provides specific guidance for the conduct of preventive maintenance as follows:

a. All required PM services shall be performed, if practical, prior to evacuating the equipment to a higher echelon for maintenance. Common sense and good judgment may indicate, however, that certain PM requirements be omitted if the corrective maintenance action duplicates or negates the effect of the PM. For example, it is unnecessary to change oil in a vehicle prior to evacuation, when it is obvious the engine will either be replaced or the oil will be removed in the corrective maintenance process.

b. PM services coming due on equipment which has been evacuated for higher echelon maintenance remains the responsibility of the owning organization. Accomplishment will be coordinated with the supporting maintenance activity. PM services will be completed as far as is possible without interfering with the required corrective maintenance. Again, common sense and good judgment will be used to preclude the accomplishment of unnecessary PM functions.

4. PM's will be conducted per the TM 4700-15/1, current technical manuals, and lubrication orders applicable to the specific equipment. Maintenance intervals are specified in the above publications. These PM services are generally cyclic in nature (calendar, mileage, rounds fired or hours of operation basis). Therefore, they must be scheduled on a periodic basis. This

achieves a systematic inspection, detection and correction cycle that prevents potential failures either before they occur or before they develop into major defects. If the instructions in the technical publications conflict with those of the manufacturer, the manufacturer's instructions will be complied with to preclude invalidating the warranty.

5. A systematic PM program will ensure a high equipment readiness program. The responsibility of PM services rests with the commander and is one of the most important factors in the organization's maintenance program. Preventive maintenance is one of the most difficult responsibilities of the command. Because the end results of PM services are not obvious, PM schedules are sometimes neglected or omitted. Frequent command inspections are encouraged. Enthusiasm is contagious. By showing an interest in the condition of equipment, supervisory personnel can influence the operators and technicians/mechanics in their maintenance efforts.

6. Commanders are authorized to vary the frequency of scheduled PM services when climatic conditions, operational commitments or additional factors warrant variation of the frequency of established PM schedules. Any variation of the PM schedule must be documented with sufficient justification. If equipment is placed in administrative storage, placed on administrative deadline or has low usage, preventive maintenance services may be deferred or intervals extended. The individual authorized to defer maintenance services, the criteria and PM requirements are contained in paragraph 3002.11 of MCO P4790.2.

7. When equipment technical manuals do not establish a definite PM frequency for the end item, the commodity manager will establish a PM schedule per MCO P4790.2. The interval will not normally be greater than semiannually unless directed by HQMC.

8. A systematic PM program consisting of inspecting, cleaning, servicing, lubricating, and adjusting is the key to equipment readiness in a unit. It is normally a function of organizational maintenance and accomplished by the unit's operational and maintenance personnel. Effectively administered PM will help prevent early breakdown or failure of equipment, thus assisting in preventing costly, complex, and time-consuming repairs and in attaining the optimum utilization of maintenance resources.

9. Corrective Maintenance (CM) will be performed by the authorized echelon of maintenance as established by the T/O. Commodities will not requisition parts that exceed their authorized echelon of maintenance as established in the SL-4's/parts manuals. The Source Maintenance Recoverability (SMR) code specifies which parts may be installed at the organizational level.

10. The battalion commander will combine the use and maximize the efficiency of all maintenance resources available, and monitor maintenance requirements of subordinates. As a last resort, overflow maintenance may be requested from the next higher level of maintenance support. Requests for overflow maintenance should be routed through the chain of command.

11. Following operational training commitments, adequate time will be scheduled to perform PM and CM. This maintenance may be performed concurrently with training requirements.

12. Equipment requiring calibration services will be evacuated to Electronic Maintenance Company, 2d Maintenance Battalion or commercial vendor as appropriate. Preparation of a second echelon ERO for induction of Test Measurement Diagnostic Equipment (TMDE) into the calibration lab is required. However, Field Maintenance Sub System supported units, whether or not they are preparing a second echelon ERO for calibration/evacuation of items from first echelon are required to establish a second echelon record on their Daily Process Report (DPR). Unit's opting not to open an ERO, must outline procedures to evacuate calibration/first echelon items in their maintenance management Standard Operating Procedures (SOP). Non-FMSS users will prepare a second echelon ERO as a control document when physically evacuating calibration/first echelon items.

13. Inspections, testing and certification of load lifting equipment is addressed in BO 11262.1.

14. Modifications will be performed by the authorized echelon of maintenance. Procedures for recording modifications are contained in Chapter 2 of TM-4700-15/1.

15. CONTACT TEAM MAINTENANCE

a. There are times when it is not practical or possible to deliver equipment requiring repair to the supporting maintenance organization. Such is the case when equipment is permanently installed in a fixed location or when a quantity of the type equipment in an organization requires the accomplishment of the same maintenance action such as modification. In such cases, it is more practical to provide maintenance support at the equipment location by use of a contact team.

b. Contact teams will be task organized to provide the support required. It may consist of one or more persons equipped with the necessary test equipment and/or tools required to accomplish the specific task requested.

c. The decision to utilize a contact team will be made by the head of the supporting maintenance organization after considering such factors as transportation costs, the feasibility of moving the equipment, work space in the shop, and the specific situation. Requests for a contact team will be made to the commander of the supporting maintenance organization in writing. Documentation (use of an ERO) is required where the support is provided.

16. Chapter 3 of MCO P4790.2 provides additional policy information of great value concerning maintenance services and procedures. Maintenance supervisors are strongly encouraged to read this chapter in its entirety.

2006. RECORDS1. General

a. Proper record keeping procedures can not be over emphasized. The maintenance records document actual services performed. Quality control and supervision is required to ensure that maintenance services were actually performed as indicated to ensure the safe operation of equipment. In the event that the equipment is transferred, the equipment record jacket is the sole source of equipment maintenance documentation.

b. Accurate equipment records are the responsibility of everyone in the chain of command, from the unit commander to the operator. Record jackets will be maintained per TM-4700-15/1 and appropriate technical manuals. Additionally, safety messages will be included in each record jacket. Commodity officers will ensure that those messages are retained in the record jackets for the life of the equipment or as dictated by the message.

c. The commodity officers will be required to maintain, prepare, care for and handle all maintenance records. When equipment is temporarily loaned or issued, a temporary record jacket will be reproduced for the using unit. The original record jacket will leave the commodity shop only for intermediate maintenance services or when the equipment has been permanently transferred from the organization to another.

2. Record Types

a. Maintenance Records. Maintenance records are maintained to provide a history of equipment maintenance requirements, to ensure the performance of required preventive maintenance, and to facilitate management decisions. Maintenance records are further classified as equipment records or maintenance resource records.

b. Equipment Records. Records required by the current edition of TM 4700-15/1 will be maintained on equipment held by Base organizations. Records for equipment for which no records are specified in TM 4700-15/1 will be maintained in accordance with other applicable Marine Corps directives, or in the case of commercial equipment, in accordance with the manufacturer's instructions. If no Marine Corps requirement exists, commanders will establish records that require the accomplishment of preventive maintenance. Entries in equipment records will be made at the time of the maintenance action by the individual performing the action. Commanders will establish procedures to ensure that individual equipment records reflect all maintenance actions performed by the owning or the supporting maintenance activity.

c. Maintenance Resource Records. Maintenance resource records are those maintained in conjunction with individual resources. For example, completion of technical schools is recorded in an individual's service record. Maintenance expenditures are recorded in maintenance documents (e.g., the SRO or ERO) and requisitions related to equipment maintenance in supply records. Duplicate records maintained elsewhere within the unit, will be held to the minimum required for effective management.

(1) Use of Equipment Repair Order (ERO)

(a) An ERO, NAVMC 10245, will be used by all commodities. The ERO will not be used to request or record either operator maintenance (first echelon) or depot level maintenance (fifth echelon). The ERO will be used by first echelon personnel in conjunction with the Equipment Repair Order Shopping List (EROSL) or DD-1348-1 to order SL-3 components.

(b) All entries on the ERO will be completed in accordance with TM 4700-15/1. Organizational commanders desiring to use entries which are reflected as optional for non Field Maintenance Subsystem (FMSS) users will indicate the specific entries required in accordance with the unit's policy.

(2) Use of the Shop Repair Order (SRO)

(a) SRO's, NAVMC 9-11200/3A, or locally produced form will be used by the following equipment commodities: engineer garrison mobile equipment (GME), automotive GME, and material handling GME.

(b) SRO's will also be opened when maintenance is performed on non-appropriated funds equipment (Special Services, Marine Corps Exchange or Club systems equipment) and on Resident Officer-in-Charge of Construction's (ROICC) equipment.

(c) All entries on the SRO will be completed in accordance with TM 4700-15/1.

(3) Use of the Equipment Repair Order Shopping List (EROSL)

(a) The EROSL (NAVMC 10925) is designed to be used in conjunction with the ERO to requisition, receipt for, cancel, record partial issues and credits of repair parts, and secondary repairable associated with ground equipment undergoing repair. The EROSL has been designated primarily for units supported by the FMSS.

(b) Use of the EROSL is optional for units not supported by the FMSS. If other forms (i.e., DD 1348.1) are used in lieu of the EROSL, disposition instructions will remain the same as for the EROSL.

(c) Instructions for completion of the EROSL are contained on the template, which is attached to the EROSL pad. The EROSL will be completed as outlined in TM 4700-15/1.

(d) Though the EROSL may not be the control (i.e., DD 1348-1, etc) document for the actual requisitioning of repair parts, the organization's maintenance and supply sections may use it as an effective management tool during the internal validation and reconciliation described in Chapter 3 of MCO P4790.2.

d. Local Records. Local records are those maintained by a unit in addition to those required by higher authority. Since the maintenance of any record requires the expenditure of personnel resources, the use of local records shall be kept to the minimum necessary to satisfy definite information requirements of the unit. Such records will be established only when it can be demonstrated that a unit record would be beneficial to other activities.

Local records are not authorized when Marine Corps standard records that do the job are available.

e. Records Review. Commodity supervisors will periodically, not less than semi-annually, review all records being maintained to ensure that a requirement exists for their continued use. Particular attention should be given to local records. Recommendations for improvements to records required by higher authority will be submitted through the chain of command to the requiring activity. Recommendations submitted to Headquarters Marine Corps shall be submitted via the Commanding General, Marine Corps Base, Camp Lejeune (Assistant Chief of Staff, Logistics).

f. Records Responsibilities. Organizational Maintenance Management SOP's must designate the types of records required for the organization and the responsibility for the preparation, care, and handling of maintenance records, by billet.

2007. REPORTS

1. Maintenance reports provide data and information for use in determining policy; planning, controlling, and evaluating operations and performance; and preparing reports for higher authority. Format and frequency of reports are determined by the specific requirements of the requiring organization.

2. Commanders will ensure that local reports are required only to meet definitive requirements, that they are economically designed, that the information cannot be obtained from an existing report, and that they are canceled when no longer justified.

3. Organizational SOP's will address those reports required by higher headquarters and specify the responsibility by section or billet for report preparation. Within maintenance management, reports required by higher headquarters are found in various directives. Most often they are required in maintenance-related programs as discussed in Chapter 8 of this Manual. Moreover, reporting requirements within maintenance management and related programs are not always on a scheduled basis; consequently, this type of report is often overlooked.

4. Recommendations for improving reports will be submitted via the chain of command to the Headquarters requiring the report. All recommendations concerning reports required will be submitted via the Commanding General, Marine Corps Base, Camp Lejeune (Assistant Chief of Staff, Logistics).

5. AUTOMATED REPORTS.

a. General. MIMMS/AIS reports will be used by all Base units possessing tactical equipment. Input responsibilities rest with trained personnel supporting the maintenance effort.

b. Automated Information System. MIMMS/AIS will be used by all Base units, possessing tactical equipment, for the recording and control of maintenance actions. MCO P4790.1, MCO P4790.2 and UM 4790-5 provide policy,

guidance, procedures and background relative to the Field Maintenance Subsystem (FMSS). MIMMS FMSS provides units with an information system for MIMMS/AIS reporting.

c. Source Documents. The ERO and EROSL will be used by Base units supported by the FMSS for the input of all MIMMS/SASSY transactions. UM 4790-5 and TM 4700-15/1 provide detailed instructions and requirements for each type of input transaction.

d. Input/Output Processing/Report Pickup. Units supported by the FMSS using data entry terminals will batch the information/transactions not later than 1500 each day for subsequent extraction by the local RASC. Output reports will be receipt for and distributed by owning unit MMO's as applicable.

e. Output Reports. The FMSS creates various management reports to be used at all levels of command. The following list provides principal reports, their frequency, and primary and alternate user:

<u>REPORT TITLE</u>	<u>FREQUENCY</u>	<u>PRIMARY/ALTERNATE USER</u>
Daily SASSY Transaction Listing	Daily	MMO/SUPO
Semi-Weekly Milstrip Rpt	Daily	MMO/SUPO
Daily Transaction Listing	Daily	Mimms Clerk MMO
Daily LM2 Listing	Daily	MMO
Daily Process Report	Daily	MMO/SUPO
Equipment Status Exception Report	Weekly	CO/MMO Base MMO
Equipment Status Report	Weekly	MMO Base MMO
LM2 Unit Report	Weekly	CO/MMO Base MMO
Weekly Major Command Tam Report	Weekly	Base MMO
Weekly/Monthly Maintenance Exception Report	Weekly	CO/MMO Base MMO

Weekly Owning
Unit Maintenance
TAM Report

Weekly

CO/MMO
Base MMO

History Process
Report

Monthly

MMO/Commodity Mgr
Base MMO

f. Retention of Class I MIMMS/AIS Reports. "Info Pac" software may be used as the retention media (tape, diskette, hard drive) for required MIMMS/AIS reports. Base units are authorized to produce "hard copies" of Class I FMSS MIMMS reports on as required basis. This will eliminate the necessity of printing and retaining reports on a daily basis to satisfy the requirements in MCO P4790.2.

g. LM2 Unit Report. The MARES LM2 Unit Report and associated RM4 remarks were designed to provide pertinent data on select organic T/E equipment authorized and possessed which have been designated as MARES reportable by MCBul 3000. Additionally, this report provides commanders at all echelons a weekly automated report reflecting current condition/status of deadlined MARES reportable equipment to include T/E excesses, deficiencies and planned allowances as well as unit readiness ratings. The purpose of RM4 remarks is to provide a narrative summary in free text format, by TAMCN for equipment affecting unit readiness and identifying potential equipment problems that could be detrimental to the mission of the unit. The LM2 report and RM4 remarks provide an overview of the effectiveness of maintenance and supply systems to include the maintenance/supply production process. The following policy/guidance is provided:

(1) Daily

(a) Review the Daily Transaction List (DTL) to ensure that all MIMMS transactions have been processed with either no errors or ensure non-critical errors are corrected paying particular attention to MARES reportable equipment. MIMMS transactions that have been processed with non-critical errors or fail the daily front-end edit shall be identified and corrected in an expeditious manner per MCO P3000.11.

(2) Weekly

(a) Review all RM4 Remarks for accuracy and completeness.

(b) Reconcile all category code "M" Equipment Repair Orders (ERO's) reflected on the Daily Process Report (DPR) against the LM2 Unit Report and the Weekly Owning Unit Maintenance Table of Authorized Material (TAM) Report. Units will manually load to the LM2 Unit Report those active category code "M" ERO's which are not reflected on the LM2 per MCO P3000.11.

(c) The commanding officer (XO when Acting) will review the MARES LM2 Unit Report on a weekly basis. The reports will be maintained by the maintenance management officer per MCO P4790.2.

(3) Monthly

(a) Reconcile the MARES LM2 Unit Report against MCBul 3000, Equipment Allowance File (EAF), and Mechanized Allowance List (MAL) in

accordance with MCO P3000.11. This will ensure "Authorized", "Possessed" and "Planned Allowance" quantities are reported correctly and that all MARES Reportable Equipment authorized and possessed is reflected on the LM2 Unit Report per MCO P3000.11. This reconciliation will be conducted by the command maintenance management officer and supply officer and documented by both parties. Results of the reconciliation will be filed and maintained with the LM2 Unit Report.

(b) Dates on RM4 Remarks will not exceed 30 days. This will validate that all information contained in the RM4 Remark remains unchanged.

(4) Figure 2-3 provides a list of transactions (via Data Entry) required for the induction of RM4 remarks (RM4 RK1 through RM4 RK9 apply). Figure 2-4 is provided as an example for the submission of RM4 remarks. Figure 2-5 provides examples and elements of information that must be included in RM4 remarks and instances in which they must be used (situations contained therein are not all inclusive). Any situations not covered should be formatted similar to those on figure 2-5 and brought to the attention of the Base MMO. All RM4 remarks will be formatted as reflected in figure 2-5.

h. Master Equipment File (MEF) Update. The MEF is used to collect life-to-date information on a specific item of equipment by serial number listed on the organizational Reporting Unit Allowance File (RUAF). The MEF contains data on material and labor expenses, total equipment operating time; number of maintenance actions by CM and PM; meter readings or dates of last CM, PM or equipment failure; and type and date of last scheduled PM. A trailer record identifies each modification applicable to the ID and the date the modification was applied to a specific item of equipment. This file is updated on a monthly basis from the Master ERO File.

2008. MODIFICATION OF EQUIPMENT

1. MCO P4790.2 and MCO P4400.84 require each unit/section which is accountable for equipment, regardless of the echelon of maintenance authorized, to establish a modification control program. Accordingly, the following policies and procedures are set forth for Base organizations:

a. Establish a modification control point by billet in the organization's maintenance SOP and outline its responsibilities.

b. Establish a modification control program per MCO P4790.2 (this information should be reproduced and provided to the commodity modification control point for use in desk-top procedures).

c. Maintain modification control records per TM 4700-15/1.

d. Quarterly, as the new SL 1-2 is published or upon receipt of applicable TI- 5600 series publications, update the commodity managers and MMO modification control records with all applicable MI's.

2. Equipment modification consists of those maintenance actions performed on equipment to change the design or characteristics in order to improve the

equipment's functioning, maintainability, reliability, and/or safety characteristics.

3. Modification of Marine Corps equipment will be accomplished only when directed by the Commandant of the Marine Corps. Authority and instructions to modify Marine Corps equipment are contained in Modification Instructions (MI's). MI's are classified as "Urgent" or "Normal" as follows:

a. Urgent - A modification required to prevent death or serious injury to personnel, prevent damage to equipment, or to make changes that are considered so essential that their accomplishment must be completed at the earliest possible time. Urgent MI's may specify a required completion in the time compliance paragraph or may specify upon receipt date and may restrict the operation of unmodified equipment.

b. Normal - All other modifications. Normal modifications must be completed within one year of the effective date of the MI and are normally accomplished on a planned/scheduled basis.

c. Kits or material required for applying a modification should be requisitioned in accordance with the current edition of UM 4400-15, using Demand Code "N" (nonrecurring demand). Requisitions received by the MCLB, Albany, within 12 months from the effective date of the MI will be filled on a "free issue" basis. Requisitions received after the 12-month period will be filled on a "free issue" basis only if the kits and material which were initially procured to support the MI are in stock. Upon depletion of materiel stocks initially procured for equipment in use, or after the 12-month free-issue period, whichever occurs last, requisitions will be rejected with Status Code ME; and the unit will be required to submit funded requisitions for the individual components of the modification kit (MCO P4400.84 applies).

4. The owning organization is responsible for ensuring that all modifications required on equipment are accomplished and properly recorded in equipment records.

5. Equipment requiring modifications that exceed the maintenance capability of the owning organization will be reported to the supporting maintenance organization. The maintenance organization, if capable of performing the modification will determine the total requirement for all supported units, obtain the required parts/material, and establish a schedule for the accomplishment of the modification.

6. Equipment modification will be accomplished in conjunction with preventive or corrective maintenance whenever possible. For example, a normal modification should be performed at the next scheduled preventive maintenance or during the next corrective maintenance period.

7. Garrison Mobile Equipment (GME) Modification Control. All tactical configured equipment held as substitute items will be considered commercial (G-TAM) as approved by Commandant of the Marine Corps (LFS-2). The Base MTO may authorize modification of garrison mobile equipment on an as required basis when such modification to the equipment is of a temporary nature and the

intent is the eventual return to the basic design of the vehicle. With the exception of fire fighting apparatus (FFA) and crash fire rescue (CFR) equipment, modification, modernization, or alteration of GME can be performed without prior approval of HQMC as long as the equipment code will not need to be changed as a result. These types of modifications do not require any record entries other than the SRO. Request for approval of modifications to FFA and CFR equipment and modifications which necessitate an equipment code change shall be submitted to the CMC (LFS-2) via the Commanding General, Marine Corps Base, Camp Lejeune (Assistant Chief of Staff, Logistics (BMTO)). Each request shall include justification, vehicle description, Marine Corps registration number and the estimated cost. MCO P11240.106 provides additional information.

2009. SUPPORT AND TEST EQUIPMENT

1. General

a. Calibration is the process by which a standard, test or measuring instrument is compared to a standard of higher accuracy and adjusted to assure that the instrument being tested meets specifications approved by the Marine Corps. The Marine Corps Calibration Program is described in MCO P4790.2 and MCO 4733.1, and amplified in TI 4733 series publications.

b. Test, measuring and diagnostic equipment used in the maintenance of other Marine Corps equipment must be periodically calibrated to ensure that repairs are properly accomplished and/or the accuracy of the repaired item. The calibration process is a continuing effort applicable to all commodity areas and technical fields using test and measuring equipment.

2. Definitions

a. Test, Measuring, and Diagnostic Equipment (TMDE). Test, measuring and diagnostic equipment includes all electrical and electronic test instruments, radiac instruments, mechanical instruments, mechanic tools and equipment, ordnance gages and instruments, engine analyzers, other items of equipment used to test equipment, measure equipment parameters, or diagnose equipment faults.

b. Full Calibration. A classification assigned to those items which must be accurate across their full range of measurements.

c. Calibration Not Required (CNR). A classification assigned to items not requiring calibration due to:

(1) Item is listed in current calibration manuals/directives as CNR.

(2) An administrative decision, made by the organizational commander, that the item is not to be used for quantitative application.

d. Inactive Calibration. A classification assigned to items not in current use which are not calibrated to conserve fiscal resources. Items bearing an inactive label must be calibrated prior to being used.

e. Rejected Calibration. A classification assigned to test or measuring equipment that has been returned to the user non-calibrated because it fails to meet the acceptance standards of the calibration laboratory. These items will be red tagged by the calibration lab and will be turned into Supply for replacement. Once the replacement item is received it will be sent to the calibration lab for calibration.

f. Special Calibration. This category applies to instruments which need to be accurate only for a portion of their ranges or functions. Examples are: torque wrenches which are calibrated for clockwise operation only, meters or signal generators which are calibrated on one or a portion of the scales (ranges) available.

g. Quantitative Measurement. The performance of accurate measurements at a specific value within established tolerances. Items used for quantitative measurements require calibration.

h. Qualitative Measurement. The performance of measurements at general values with broad or no tolerances specified. Meters used to determine the presence of voltage, where the exact measurement is not desired, are being used for qualitative measurement. Items used for qualitative measurement will have a calibration not required label affixed.

3. Calibration Control. The unit will establish a calibration control program and coordinate the calibration control effort as follows:

a. Establish a calibration control system, either centralized or decentralized as outlined in TM 4700-15/1.

b. Annually, perform an inventory of all TMDE available in the organization. Special care must be exercised in this inventory to ensure that TMDE which are components of other end items, such as tool kits or chests, are included. Concurrent with this inventory, the commander will determine the calibration requirement, i.e., full calibration, special, calibration not required, inactive, for each item possessed. Maximum use will be made of the calibration not required, inactive, and special calibration classifications. The annual inventory shall include an evaluation of all TMDE held at calibration control points to ensure that it is in the correct calibration category consistent with its function and to determine if an item is required/not required.

c. Coordinate with the supporting calibration facility on those items for which commodity managers cannot determine calibration.

d. Identify all TMDE within the unit, including individual items and those items which are part of chests, sets and kits. When a tool set does not require calibration, an item within the set, which does require calibration, may easily be overlooked. Normally, Marine Corps equipment with an Operational Test Code (OTC) of 3 on the Marine Corps Management Data List (ML-MC) or FED-LOG disk will require calibration. Similar commercial equipment will also normally require calibration. Commercial equipment and some Marine Corps equipment requiring calibration will not be so identified in

the ML-MC. This information is provided only for assistance in identifying calibration requirements. The calibration facility is the final local authority to determine calibration requirements and intervals.

e. Submit for calibration all TMDE that has been purchased new, received from another organization without a current label, on regular recall, or removed from inactive status.

f. Request special calibration for TMDE which is used in only a specific portion of its complete range.

g. Request "calibration not required" labels from the calibration lab for those instruments which are not used for quantitative measurements.

h. Request "inactive" labels from the calibration lab for TMDE not expected to be used during the next full calibration cycle.

i. Ensure current labels are affixed to all TMDE.

j. Establish a calibration control point within the maintenance shop.

k. Upon return of TMDE from calibration, the calibration control point must update the calibration control records with the calibration due date from the label on the equipment and notify the unit's MMO of the following information:

(1) The date calibrated.

(2) The next due date.

l. Maintain a list, updated at least annually of all TMDE by type, quantity and location.

m. TMDE designated as "CNR" or "INACTIVE" require organizational PM's at six and twelve month intervals, respectively, between intermediate PM's if required. PM scheduling and recording on the calibration control records are not required. Validation status for items designated as "CNR"/"Inactive " is required to be scheduled annually. Record date validated in "Date Cal Perf" block and schedule next validation in "Date Cal Due" block of calibration control form.

n. TMDE designated for special calibration as defined above, will have specific calibration requirements entered in the remarks block of the calibration record.

o. TI-4733-15/11 provides procedures and instructions for operation of the Marine Corps Infantry Weapons Gauge Calibration Exchange Program.

2010. SAFETY

1. Commanders are responsible for the prevention of accidents involving personnel, equipment, and property within their organization. They will

incorporate safe practices into all operations and will initiate corrective action to eliminate safety hazards. Supervisory personnel at all levels shall ensure that all personnel in their charge are instructed in safe measures applicable to their respective areas of operation and that all safety regulations are strictly observed and enforced.

2. The Base Safety Officer is responsible for the establishment and function of the Command's safety program. The unit's safety officer, acting in conjunction with the Base Safety Officer, MMO and the maintenance officers, will ensure safe practices and procedures are developed and followed in all maintenance operations.

3. Standing operating procedures for safety within this Command are set forth in BO P5100.3. The Marine Corps Safety Program is established by MCO 5100.8. A comprehensive treatment of safety precautions is contained in the Occupational Safety and Health Administration, more specifically 29 Code of Federal Regulations, Part 1910 (29CFR 1910).

4. Procedures for handling hazardous material are contained in OPNAVINST 5090.1. MCO P5090.2 provides policy and guidance concerning emergency spill response, Material Safety Data Sheets, accumulation sites for contaminated rags, personal protective equipment, etc.

5. General Safety Precautions Applicable to All Maintenance Areas

a. All maintenance areas shall be continuously inspected for safety hazards and good housekeeping.

b. Personnel shall immediately report all potential hazardous situations to their immediate maintenance supervisors.

c. Horseplay shall not be allowed within any maintenance facility.

d. All equipment shall be operated in accordance with existing regulations.

e. Only authorized cleaning agents will be used for cleaning. Gasoline is not authorized for cleaning.

f. Fire bills, fire alarms, fire extinguishers, and fire station assignments shall be clearly marked. The "fire" and "medical" emergency telephone numbers shall be posted near each fire station and telephone location.

g. Spilled POL shall be cleaned up immediately.

h. All working areas shall be constantly policed and kept free of debris.

- i. Tools shall be properly stored when not in use.
 - j. Shop areas shall be well ventilated.
 - k. Personnel shall wear appropriate safety equipment at all times. This equipment includes, but is not limited to: safety shoes, eyewear, face shields, ear protectors, gloves and protective suits.
 - l. While performing maintenance, personnel shall not wear loose-fitting clothing or jewelry. When working with electrical sources, no metal, jewelry or dog tags will be worn.
 - m. All tools shall be used properly and only in jobs for which they are designed.
 - n. Handles shall be kept secure and mushroomed or burred heads shall be dressed down on hammers, chisels, etc..
 - o. Sharp tools shall be stored in a safe place when not in use.
 - p. When using tools, the working force shall be applied in a direction away from the body.
6. The preservation of human life and government property is of primary interest to this Command. It is not sufficient to treat personnel after they have been injured or to reclaim/rebuild damaged property. Safety consciousness cannot be assumed; it must be developed. Supervisory personnel must continually strive to identify and impress upon their personnel the dangers inherent in their particular MOS, as well as their prevention and cure. Personnel must be instructed in appropriate procedures to be followed in the event of an accident.
7. Load testing, as required by BO 11262.1, will be accomplished by all Base organizations.

2011. RECOGNITION OF PERFORMANCE

- 1. The maintenance management program will be a success only if trained, motivated maintenance personnel are available. Commodity managers will continually review the quality of the work performed by the personnel assigned and take corrective/commendatory action as required.
- 2. Supervisors at all levels will provide on-the-spot correction and training where evaluation indicates less than adequate performance. Disciplinary action will be initiated where appropriate, such as when negligence, indifference or a lackadaisical attitude is detected.
- 3. Often our attention is focused on the substandard performer. This is particularly true among individuals performing in support billets who are often only noticed when something goes wrong. Commodity managers are encouraged to officially recognize superior performers whenever warranted.

4. It is the responsibility of all supervisory personnel to recommend personnel for awards, promotions, meritorious masts and any other recognition of superior performance. Recognition of outstanding performance is the most effective motivating factor the commodity manager has. The recognition of personnel leads to a high state of morale and produces a better working environment for maintenance personnel.

2012. COMMODITY PERSONNEL ASSIGNMENT

1. The unit T/O serves as the basic management tool for personnel assignment within commodities. The T/O concept is not inflexible; however, military personnel with critical MOS's should not be assigned outside their MOS's per MCO P1200.7.

2. Commanders and staff officers in conjunction with appropriate personnel officers are responsible for ensuring personnel misassignments are strictly controlled and do not have an adverse impact on maintenance and operations.

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

UNITED STATES MARINE CORPS
UNIT
PSC BOX 20004
Marine Corps Base
Camp Lejeune North Carolina 28542-0004

SSIC
ID
(Date)

From: Commanding Officer
To:

Subj: PERSONNEL AUTHORIZED TO SIGN EQUIPMENT REPAIR ORDERS (ERO'S) NAVMC
10245'S AND EQUIPMENT REPAIR ORDER SHOPPING LISTS, (EROSL'S) NAVMC
10925'S

Ref: (a) BO P4790.1_
(b) MCO 4400.16_

1. Per the references, the following personnel are authorized to sign
Equipment Repair Orders (ERO'S) NAVMC 10245'S and Equipment Repair Order
Shopping Lists (EROSL's) NAVMC 10925's.

a. Personnel authorized to sign priority 07 thru 14 ERO's:

<u>NAME</u>	<u>GRADE</u>	<u>BILLET</u>	<u>SAMPLE SIGNATURE</u>
-------------	--------------	---------------	-------------------------

Commanding Officer			
Executive Officer			

b. Personnel delegated the authority to sign priority 07 parts
requisitions, (EROSL's) NAVMC 10925's, once the supporting Equipment Repair
Order (ERO) NAVMC 10245 has been authorized by the Commanding
Officer/Executive Officer:

<u>NAME</u>	<u>GRADE</u>	<u>BILLET</u>	<u>SAMPLE SIGNATURE</u>
-------------	--------------	---------------	-------------------------

S-4 Officer			
Command MMO			

c. Personnel authorized to sign priority 09 thru 14 (ERO's) NAVMC
10245's and (EROSL's) NAVMC 10925's:

<u>NAME</u>	<u>GRADE</u>	<u>BILLET</u>	<u>SAMPLE SIGNATURE</u>
-------------	--------------	---------------	-------------------------

2. This letter supersedes the previous letter of authorization dated _____

/s/_____
Commanding Officer

Figure 2-1.--Sample Letter of Personnel Authorized
to Sign ERO's and EROSL's by Priority.

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

UNITED STATES MARINE CORPS
UNIT
Marine Corps Base
Camp Lejeune, North Carolina 28542

SSIC
ID
(Date)

From: Commanding Officer
To: Commanding Officer, 2d Maintenance Battalion (Attn:MOS)
Subj: PERSONNEL AUTHORIZED TO RECEIPT FOR MATERIAL AND EQUIPMENT FROM THE
INTERMEDIATE MAINTENANCE ACTIVITY
Ref: (a) BO P4790.1_ *
(b) FSSGO P4790.4_

1. Per the instructions contained in the references the following personnel are authorized to receipt for material and equipment from the supporting intermediate maintenance activity.

<u>NAME</u>	<u>GRADE</u>	<u>SSN</u>	<u>SAMPLE SIGNATURE</u>
-------------	--------------	------------	-------------------------

2. This letter supersedes the previous letter of authorization dated_____

/s/_____
Commanding Officer

Figure 2-2.--Sample Letter of Personnel Authorized
to Receipt for Material and Equipment at the
Intermediate Maintenance Activity.

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

<u>MEFTYC</u>	<u>MEFTYE</u>	<u>RM4RK2</u>	<u>T</u>	<u>0/A</u>	<u>0/C</u>	<u>0/T</u>	<u>3</u>
<u>4ADPTS</u>	<u>4CHGPT</u>	<u>5</u>	<u>7</u>	<u>8PARTS</u>	<u>9</u>	<u>RM4RK3</u>	<u>RM4RK4</u>
<u>RM4RK5</u>	<u>RM4RK6</u>	<u>RM4RK7</u>	<u>RM4RK8</u>	<u>RM4RK9</u>	<u>LM2AST</u>	<u>LM2DLN</u>	<u>MEFTYA</u>
<u>RM4RK1</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>

2

Figure 2-3.--Transaction Access Utility List

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

=> MODE SCROLL

```
-----TRANS-ID:RM4RK1-----
MIMMS1 :   IMD           STATE EDTED           BATCH-ID           150/9219 RECORD 1
-----
NUM.....RM4                CLASS.....U
TRANS-CD.....A              TYP.....RM4
UNIT-ID.....M93089          SEQ-NUM.....1
CARD-CNT-NUM....4          RMLBL.....TAMCN
RMTAM.....A2050            RMADMDL.....
DTE.....890807
REMKS-CARD-1.....T/E AUTH QTY 020, POSS QTY_____
```

MODE SCROLL

```
-----TRANS-ID:RM4RK2-----
MIMMS1 :   IMD           STATE EDTED           BATCH-ID           150/9219 RECORD 2
-----
NUM.....RM4                CLASS.....U
TRANS-CD.....A              TYP.....RM4
UNIT-ID.....M93089          SEQ-NUM.....2
CARD-CNT-NUM....4
RMKS-CARD-2.....000. QTY 020 T/E DEF DUE TO T/E ALLOW CH. QTY 020_____
```

MODE SCROLL

```
-----TRANS-ID:RM4RK3-----
      S1
:   IMD           STATE EDTED           BATCH-ID           150/9219 RECORD 3
-----
NUM.....RM4                CLASS.....U
TRANS-CD.....A              TYP.....RM4
UNIT-ID.....M93089          SEQ-NUM.....3
CARD-CNT-NUM....4
RMKS-CARD-3.....REQN 9194, DOC # M93089-9194-0565. PRIORITY 14_____
```

MODE SCROLL

```
-----TRANS-ID:RM4RK4-----
:   IMD           STATE EDTED           BATCH-ID           150/9219 RECORD 4
-----
NUM.....RM4                CLASS.....U
TRANS-CD.....A              TYP.....RM4
UNIT-ID.....M93089          SEQ-NUM.....4
CARD-CNT-NUM....4
RMKS-CARD-4.....CMC LTR 4015/1/4, LPP4 OF 10 APR AUTH._____
```

Figure 2-4.--Examples for Submission of RM4 Remarks

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

DEFICIENCY DUE TO RECENT T/E ALLOWANCE CHANGE:

T/E=020

QTY 020 T/E DEF DUE TO T/E ALLOW CH.

QTY 020 REQN 9194, DOC NR M930899194 0565, PRI 14. LKH-MPB BB STATUS AS OF 9255. CMC LTR 4015/1/4 LPP4 OF 10 APR 89 AUTH.

DEFICIENCY DUE TO FORCE FEED OF NEW ITEM:

T/E=016

QTY 012 REC 9200 DOC NR M95406215001. QTY 004 T/E DEF DUE TO FORCE FEED OF NEW ITEM. REQN NOT AUTH. MCO 8370.26 APPLIES.

DEFICIENCY DUE TO WIR SUBMISSION:

T/E=040

QTY 002 T/E DEF DUE TO ITEM CODED OUT ON WIR DOC NR M930559224E016. QTY 002 REQN 9235, DOC NR M93055 9235G016, PRI 06. LKH-MPB BB STATUS AS OF 9255.

PLANNED ALLOWANCES:

T/E=000, O/H=002.

QTY 005 PLANNED ALLOWANCE FOR FY 92 PER EAF DTD 1 JUL 90 (SEE NOTE)

EXCESSES PENDING MODIFICATION OF ALLOWANCE SUBMISSION:

T/E=010

QTY 005 T/E EXCESS. PENDING MOA SUBM DUE TO MOA MORATORIUM IMPOSED. CMC WASH DC 101956Z MAY 89 APPLIES.

EXCESSES PENDING APPROVAL FROM CMC:

T/E=005

QTY 002 T/E EXCESS. MOA SUB TO CMC. CO, MCES LTR 4015 SUP OF 24 APR 89 W/CG, MCB CLNC LTR 4015 SUPSPT SSB-01 OF 1 MAY 89 1ST END APPLIES.

EXCESS QUANTITY ON HAND PENDING DISPOSITION INSTRUCTIONS:

T/E=012.

QTY 002 T/E EXCESS. WIR FOR QTY OF 002 EA SUBM ON CG MCB CLNC 051604Z MAY 89. WIR DOC NR M93953 9121EM15 APPLIES.

EXCESS QUANTITY ON HAND PENDING EAF CHALLENGE:

Figure 2-5.--Examples of Standardized RM4 Remarks

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

T/E=450

QTY 100 T/E EXCESS. EAF DTD 18 APR 89 REFL 550 T/E AUTH QTY. EAF DTD 18 AUG 89 REFL 450 T/E AUTH QTY. EAF CHALLENGE SUB TO CMC. CO, SOI LTR 4015 S4/ SUP OF 29 AUG 89 W/CG, MCB CLNC LTR 4015 SUPSPT/SSB-02 OF 1 SEP 89 1ST END APPLIES.

NOTE: ON HAND ASSETS WILL BE REPORTED AS THEY ARE RECEIVED. THE AUTHORIZED QTY ON THE LM2 REPORT WILL REFLECT 0 QTY UNTIL THE PLANNED ALLOWANCE IS CHANGED TO REFLECT ACTUAL ALLOWANCE ON THE EAF.

Figure 2-5. Cont--Examples of Standardized RM4 Remarks

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

CHAPTER 3

SUPPLY AND FISCAL SUPPORT

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STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

CHAPTER 3

SUPPLY AND FISCAL SUPPORT

3000. SUPPLY SUPPORT

1. General

a. Maintenance at any echelon requires adequate supply support. Effective maintenance cannot be accomplished without this support. If maintenance is accomplished on a scheduled basis and necessary parts are placed on order when required, the supply system will readily respond to the requirement. Ignorance of proper procedures; failure to ensure timely requisitioning, reconciliation's and follow-ups; improper accounting, storing and issuing parts/material contribute to the breakdown of the supply maintenance chain. Aggressive follow-up action is as much a function of maintenance as installation of the part when it is obtained. Equipment should not be allowed to deteriorate to the point where trouble has become compounded; this will increase the response time of the supply system.

b. To facilitate supply support, preventive maintenance services on equipment should be scheduled over the entire period of the requirement. For example, quarterly PM's should be spread over the entire quarter. This not only aids maintenance by providing an even workload, it enables the supply system to capture valuable usage data, thus allowing stockage of the parts/material used in providing the service. Stockpiling of parts in the maintenance facility and obtaining parts from other sources (scrounging) and not reporting usage, does not create usage data and results in the supply system not being able to provide the part readily when the stockpile or other sources are exhausted. The supply system will support the maintenance effort if maintenance personnel provide the required input documentation and practice supply discipline.

c. Timeliness in the procurement of repair parts is critical to mission attainment and the effectiveness of the maintenance effort. MCO 4400.16 has assigned Force/Activity Designator (F/AD) Code IV to Marine Corps training bases. This assignment limits Base activities' use of priority designators (as determined by Urgency of Need Designators "A", "B" and "C") to 07, 09 and 14 respectively. Special reimbursable accounts with the SMU and 2d Maintenance Battalion have been authorized. The SMU is the primary source of supply for Class IX repair parts for tactical T/E assets. Class IX repair for non T/E equipment may be procured through the DSSC or the Contracting Division. Daily pickups from authorized sources of supply are required by the unit supply and maintenance sections to ensure the timely flow of parts to the technician. Enclosure (1) of MCO 4400.16 establishes time standards for the supply of materiel from the time of origination of the requirement (date of the requisition) to the time of physical receipt posting to the requisitioner's inventory records.

2. Supply Coordination. Coordination between maintenance and supply activities is essential to the maintenance effort. Open active communication channels must exist between maintenance units and the supporting supply

activity. The supply officer must be aware of the problems of the maintenance officer and ensure that proper procedures are used and that supply discipline is practiced within the maintenance shop. Supply discipline is characterized by ensuring:

- a. Only required material is requested.
- b. Proper forms and procedures are used to request required material.
- c. Materiel is properly applied.
- d. Materiel not used is returned promptly to the supporting supply activity.
- e. Usage is recorded for items obtained from sources outside the supply system.
- f. Outstanding requisitions are reviewed biweekly to validate the continued need for the material.

3001. REPAIR PARTS REQUEST SYSTEM

1. Sources of Supply. There are three sources of supply repair parts for Base organizations. They are Supply System Stocked Items, Supply System Nonstock Items, and Non-System Items procured from local vendors.

a. Stocked/System Items

(1) As stated in paragraph 3000.1 of this Manual certain units possessing tactical equipment and authorized reimbursable accounts with the SMU will use the SMU as their primary source of Class IX repair part support. Commanders of those organizations should familiarize themselves with the contents of UM-4790-5 and UM 4400-124.

(2) For commercial equipment the Base is primarily supported by the Shop Stores and Self Service Branches of the Direct Support Stock Control (DSSC) Division. Issue points are established to position this supply support near the point of use.

(3) MCO P4400.76, the Marine Corps Unified Material Management System (MUMMS) Direct Support Stock Control (DSSC) Manual concludes that only items which meet specific criteria with respect to cost, frequency of demand, and suitability be considered for stockage. Procedures for requesting new items in Shop Stores are contained in MCO P4400.76. Commanders of those organizations which require repair parts support should familiarize themselves with Chapters 1, 3, 7, and 8 of MCO P4400.76.

b. Nonstock Items. System items not stocked in the Shop Stores Branch because of lack of usage will be requisitioned on DD 1348 MILSTRIP documents through the DSSC office. Specific instructions for the procurement of Nonstock System Items are contained in BO P4400.5 (Logistics Manual).

c. Non-System Items

(1) Repair parts not stocked in the Supply System (Non-System Items) may be purchased by authorized organizations using IMPAC cards with local vendors. BO P4200.10 (Using Unit Procedures For Obtaining Contracting Division Support) provides detailed assistance relative to IMPAC cards. Contracting Division Support) provides detailed assistance relative to IMPAC cards.

(2) Organizations authorized to place orders against established BPA's are identified by separate correspondence addressed to that organization.

(3) Organizational commanders possessing this authority must establish internal control procedures to ensure the following is accomplished:

(a) Repair parts numbers are checked in the Shop Stores catalog for availability.

(b) Repair parts numbers not listed in the catalog are verified with the DSSC as Non-System Item.

(c) Non-System repair parts which exceed authorized limitations are submitted via DSSC to the Base Contracting and Purchasing Officer on DD Form 1348-1. Refer to BO P4200.10 for detailed guidance.

d. Contractor Operated Parts Store (COPARS). The GME fleet manager is authorized the use of COPARS in the maintenance of the GME fleet.

2. Source, Maintenance and Recoverability (SMR) Codes

a. Repair parts will not be ordered for any echelon of maintenance that exceeds the authorized capability of the unit. The echelon authorized to remove, replace, and repair a part/component is indicated by the third and fourth digits of the Source, Maintenance and Recoverability (SMR) code. The third digit identifies the echelon that may remove and replace the part/component. SMR codes are listed in SL-4's and repair parts lists.

b. To the maximum extent possible, all parts required to repair an item of equipment will be requisitioned at one time to preclude prolonged deadline time.

3. Requisition Priority Designators

a. Priorities will be assigned to repair parts requisitions per the instructions contained in MCO 4400.16, UM-4400-15 and BO 4400.12. The proper priority is determined by combining the Force/Activity Designator (F/AD) with the urgency of Need Designator (UND).

b. Commanders may delegate authority to sign/approve UND "A" requisitions (DD-1348 or NAVMC 10694, EROSL's) required to support ERO's that are properly authorized. Such delegation will be in writing and will apply only to those repair parts reflected on the approved ERO. The approved ERO must be assigned

a UND "A" priority and signed by the appropriate authority per paragraph 2003.6 of this Manual. This authority may be extended to include category "C" ERO's of similar priority supported by a properly authorized base ERO. Assignment of category codes to ERO's will be accomplished per TM 4700-15/1 and UM-4790-5. Table 2-1 of TM-4700-15/1 provides a matrix indicating the appropriate UND to be used for assignment of priorities to specific ERO category codes.

c. Persons authorized to review/approve UND "A" and "B" priority designators will affix their signature to the original and retained copy of all supply/maintenance documents requiring approval prior to submission to the service provider.

3002. REPAIR PARTS CONTROL

1. Pre-expended Bins

a. Pre-expended bin (PEB) items provide continuous availability of low-cost, fast-moving items for mechanics and technicians performing maintenance. The primary reason for maintaining PEB's is to enhance maintenance operations and economical management of low-cost, fast-moving, expendable items.

b. The PEB criteria are as follows:

(1) Fast-moving consumables eligible for stockage as PEB items are those with six individual demands in six months when the full unit of issue (U/I) is applied/consumed and one unit of issue in six months when less than a full U/I is applied/consumed. Additionally, the unit price may not exceed \$100.00 per U/I.

(2) Consumables approved for stockage as PEB will not exceed 30 days of supply for each unit, based on an average demand over the previous 12 months.

(3) To accommodate peak demand periods for units supporting intermediate or depot level maintenance, the highest two month's usage of the previous 12 month's history may be averaged to establish 30 days of supply for the line item. Further, local exceptions are authorized for specific, peculiar usage patterns for U/I, such as feet or gallons, provided each is justified in writing during a scheduled review and will not exceed the \$100 unit criterion.

(4) Those consumables applied in quantities less than a full U/I (e.g., box, hundred, mix, etc.) will be held not to exceed two full U/I's, except if 30 days of supply is the greater quantity.

(5) The Commanding General may grant selective waivers to the unit price criteria for units that are authorized intermediate level maintenance by T/O, and for GME and facilities maintenance activities. For all units other than GME and facilities maintenance activities, this waiver will only apply to the specific maintenance functions authorized intermediate level maintenance on the T/O. The waiver will be granted in writing and will be reviewed at

least annually. The upper limit on this waiver will not exceed a unit price of \$300. Requests for waivers will be submitted to the Commanding General, Marine Corps Base, Camp Lejeune, (Assistant Chief of Staff, Logistics).

c. Authorization letters from the commanding officer authorizing PEB's will contain the following information at a minimum:

(1) National Stock Number/Part Number.

(2) Nomenclature.

(3) Unit of Issue.

(4) Unit Price.

(5) Maximum Quantity Authorized.

(6) Total Price.

(7) Reorder Point (ROP).

(8) Bin Location # (entries under this column may be left blank and subsequently entered in pencil or grease pencil by the section maintaining the PEB).

d. Once a PEB is authorized each bin must be established with the following annotated on the bin; bin #, and NSN. When a unit deals with small parts, the reorder point quantity is placed in a bag in the bin. When the parts personnel have to open the bag to get a part, they know it is time to reorder more parts.

e. All items that bins are prepared for must be authorized by the commanding officer. If an item is not on a shop's PEB letter, it is not authorized to be in the bin.

f. New items recommended for inclusion in the PEB may be incorporated into the PEB authorization letter on a one time basis only. These new items should be placed at the end of the letter under the heading "NEW ITEMS." Initial projections for requisitioning objectives (RO's) will not exceed one unit of issue (U/I) for other than each (EA) or pair (PR) or a quantity of 20 for U/I's of EA or PR. The reorder point (ROP) will not exceed five. If the item fails to meet the PEB criteria within 12 months, the item will be deleted from the PEB and any remaining quantities will be rolled back to supply or retained until exhausted. Items being retained until exhausted must be so designated in the authorization letter.

g. PEB Computations:

(1) Prior to the computation of the RO and ROP for new items, a minimum of 12 months usage data (quantity used, requisitioning delays, number of orders, etc.) must be collected for each item included in the authorization letter. Once an item has established a usage pattern, 12 months of usage data must be used to identify stockage levels. Therefore PEB quantities go through a maturation cycle from initial projection to stockage based on a year's usage

data. The 12 months usage data standard is established to account for seasonal fluctuations, etc. The preferred method of maintaining history/usage data is through the use of a local microcomputer automated tracking system, log books, or dropsheets. Selection of a suitable method is left to the commanding officer's discretion.

(2) From the recorded usage data the average number of parts used permonth (U) and the average procurement lead time (T) need to be calculated. The below equations apply:

(a) Usage (U) is the sum of the parts applied during the period of time divided by the number of months (preferably 12).

$$\frac{\text{PARTS}}{\text{MONTHS}} = U$$

(b) Procurement Lead Time (T) is the sum of all requisitioning time delays, divided by the number of requisitions, during the period.

$$\frac{\text{TIME}}{\text{REQUISITIONS}} = T$$

Note: Requisitioning time delays can be easily calculated through the use of the EROSL's/DD 1348's. Requisitioning time delays is defined as the difference between the day the EROSL/DD 1348 was received by supply and the parts received at the maintenance facility. Both dates must be annotated on the requisition. Calculated procurement lead time (T) should be carried out to two decimal places (i.e., 1.37) for the sake of accuracy. Calculated monthly usage quantities should be rounded to the next higher whole number (integer).

(3) The PEB formulas are:

$$(a) \text{ ROP} = U \times T$$

$$(b) \text{ RO} = \text{ROP} + U$$

Note: The above ROP and RO formulas are based on the assumptions that the demand for the parts are constant and that past requisitioning delays adequately predict future lead times. These assumptions may not always hold statistically true resulting in some minor variations in the PEB's stock posture. If these variances (excesses/shortages) are significant, a review should be initiated for direct causes and necessary corrective actions. No safety stock is incorporated into the formulas since none is authorized by MCO P4400.150. Units desiring to use formulas other than the above must have their PEB formulas approved by the Base MMO.

h. PEB's will be reevaluated at least semiannually and approved in writing by the commander.

i. Broken U/I's (i.e., 98 washers left over from U/I of HD) which are ordered against a corrective maintenance ERO, and do not meet PEB criteria, are authorized to be retained as a PEB item until exhausted. These items must

be identified as such and will not be reordered when exhausted. For units authorized PEB broken U/Is will be identified as a separate enclosure to the PEB authorization letter. For units that have broken U/I's on hand and not authorized a PEB, a letter of authorization to retain these items must be signed by the commanding officer.

2. Excess Parts. Excess repair parts received from any source will be turned in to the supporting supply agency/section to facilitate proper accounting. Prior to turn-in, parts will be properly identified by NSN. Repair parts will not be stockpiled in maintenance sections. "Goody Boxes" will not be condoned.

3. Maintenance by Cannibalization. Maintenance by cannibalization is defined as the removal of a serviceable part or component from one item of equipment for use in repairing another item of equipment. Selective interchange is a form of cannibalization. *

a. Decisions concerning cannibalization of tactical equipment will be made on a case-by-case basis. Cannibalization may be approved only by the Commanding General or the commander of the unit having intermediate third echelon maintenance, or higher, on the equipment. Additional details concerning cannibalization criteria are contained in chapter one of MCO P4790.2.

b. Requests for authority to cannibalize will be submitted to the Commanding General, Marine Corps Base, Camp Lejeune, (AC/S, Logistics (MMO)). Emergency request may be made telephonically, backed up by written submission (figure 3-1). If authorized, cannibalization will generally be accomplished at the lowest maintenance echelon authorized to remove and replace the part/component.

c. Cannibalization for commercial-type items of station property will not be employed except:

(1) When the original acquisition cost is \$5,000.00 or less, and;

(2) When, in the opinion of the organizational commander, such an item is no longer usable in its present condition and could not be economically repaired and used for the purpose for which originally intended, nor could it be expected to realize a fair market value if used for trade-in purposes.

4. ERO/SRO Bins

a. If more than one repair part has been requisitioned for an item of equipment and it is impractical to install the parts individually as they are received, an ERO/SRO bin (also known as layette bins) will be established either by the organization's supply section or in the maintenance shop.

b. Organizational commanders must specify procedures for the use and control of ERO/SRO bins and the responsibility for the maintenance and control thereof. Minimum procedures which must be established are as follows:

(1) Designate by billet who has responsibility for the layette bins.

(2) A copy of the EROSL must be maintained with the parts that are placed in the layette bins.

(3) All parts received by the maintenance shop will have the associated requisition annotated with the Julian date received and the layette bin clerk's initials.

(4) When all parts have been received, the maintenance supervisor will be notified.

(5) When the technician picks up the repair parts, the technician will affix the Julian date received, quantity received, and his/her initials.

(6) Access to the area where parts are stored will be controlled to eliminate the possibility of parts being used on equipment other than for which they were ordered.

(7) ERO bin locations and large parts must be marked per paragraph 2004.4 of MCO P4790.2.

(8) Each item on requisition must be validated biweekly.

5. FACILITIES MAINTENANCE. Chapter 7 of MCO P11000.7 addresses repair parts and materials control for facilities maintenance. Where the criteria differ from this Manual, the Facilities Maintenance Officer will be guided by the provisions of MCO P11000.7.

3003. DIRECT EXCHANGE

1. The secondary reparable (SecRep) program serves to provide a pool of ready for issue components (Maintenance Float) available for direct exchange (DX) of like items and subsequent repair by designated maintenance facilities authorized to repair the equipment. Secondary repairable items requiring repair or exchange will be sent to 2D Maintenance Battalion, 2D Force Service Support Group. These items will have an Inspection Form (NAVMC 1018), completed in accordance with TM 4700-15/1, affixed, and will be accompanied by a properly completed ERO.

2. FSSGO 4400.20. sets forth the policy and procedures concerning secondary repairables. Personnel authorized to receipt for material and reconcile with the maintenance float will be designated in writing (figure 3-2).

3. Units that are authorized sub-floats will be guided in their operation by MCO P4400.82, UM-4400-15 and FSSGO 4400.20.

3004. NEW EQUIPMENT

1. Policy for Using/Serviceing Organizations

a. New items of equipment will be placed on administrative deadline and will not be put into service until all of the following standards, as applicable, have been met by the using/serviceing organization:

(1) All authorized stock levels/allowances of peculiar support items (repair parts, components, collateral equipment, kits, test equipment, tools, and technical manuals) are on hand.

(2) Adequate stocks of common support items are on hand.

(3) Sufficient trained operators are on board.

(4) Sufficient trained technicians/mechanics are available at all repair echelons.

(5) Adequate funds have been requested in the appropriate fiscal year budget.

(6) Approval to place the new equipment into service has been granted by the Commanding General.

b. Product Quality Deficiency Reports will be submitted, as applicable, in accordance with MCO 4855.10.

2. Activation of New Equipment

a. Upon activation of new equipment, organizational commanders will notify the Base Maintenance Management Officer.

b. Ensure that supervisory personnel are familiar with the contents of the current edition of MCO 4400.32.

3005. MOUNT OUT. Marine Corps Base units do not maintain any mount out stocks.

3006. VALIDATION AND RECONCILIATION

1. Definitions

a. Validation. This is the process by which requirements are confirmed. It involves confirmation of requirements which are still needed, cancellations, receipts, scrounges, and current status. When confirming needed requirements, the customer must ensure that they still exist, have been made known, and are resident in the supply system.

b. Reconciliation. The process by which an organization ensures validated requirements are properly logged within the supply system and MIMMS.

2. Requirements. Validation and reconciliation must be conducted for the three sources of supply addressed in paragraph 3001.1 preceding. Accordingly, the following procedures are established:

a. Validation/Reconciliation Procedures (FMSS-Supported Units)

(1) Frequency. Minimum requirements for validation of organizational ERO's are set forth in the following paragraphs. Due to the large number of ERO's at intermediate maintenance shops, the frequency of validation may require adjustment.

(2) Daily. Each day the MIMMS/records clerk will accomplish the following:

(a) Verify the daily transaction list (DTL).

(b) Check to ensure that ERO's shown on the Daily Process Report (DPR) are in the correct job status.

(c) Check those ERO's in a "short parts" job status with no parts trailers to ensure the EROSL's have been prepared and submitted. If an EROSL has not been submitted, make submission as soon as possible.

(d) Check off those parts transactions on the EROSL which have been submitted to the supply source and appear on the DPR. If all parts transactions on the EROSL do appear on the DPR, the EROSL will be attached to and filed with the pending copy of the ERO. If any parts transactions on the EROSL do not appear on the DPR, check off those transactions which do appear and file the ERO/EROSL in a pending file/ERO tub until all transactions are checked off. Always verify the input data to the EROSL for accuracy. An EROSL will have the following annotations noted for parts/materiel received from the supply source. The procedures for annotating the EROSL will be established in the unit's SOP.

1 An EROSL will be annotated as to the quantity received and date received.

2 An EROSL will be annotated with the ERO bin location for those items placed in ERO bins. If the ERO number is used in ERO bin assignment, the annotation of the ERO bin location is not required.

3 An EROSL will be annotated when parts are issued to the shops for installation.

(3) Biweekly. Every two weeks, after completion of the daily validation, the commodity manager, shop/maintenance officer or chief will accomplish the following:

(a) Review the daily validation procedures to ensure that they are accomplished properly.

(b) Ensure that all ERO's cite the category codes which accurately reflect the actual condition and status of the equipment.

(c) Compare all ERO's on the DPR in a short parts status with the ERO and EROSL to ensure that:

1 ERO job status is correct.

2 ERO category and priority are valid.

3 An EROSL has been prepared, document numbers assigned, and transactions processed.

4 The priorities assigned to document numbers on EROSL's must logically follow the priority and category code assigned to the ERO. Requisitions of lower priority that cannot be justified as UND, "A", "B" should be requisitioned using a lower priority on the same ERO. Upon receipt of UND, "A" and "B" requisitions the ERO should be downgraded accordingly.

5 The priorities assigned must meet the criteria contained in MCO 4400.16.

(d) When all critical parts have been received for a category "M" ERO but noncritical parts remain outstanding, ensure that all critical parts are installed as well as those noncritical parts which are practical to install. Then either the category code will be changed to "N" or a new ERO will be opened. If a new ERO is opened, ensure that the following actions have been accomplished:

1 All pending parts have been transferred to the new ERO via an "8 card" with Authority Code 9 in CC 27 and a new ERO number has been entered in CC's 55-59. If all parts on an EROSL are not installed, change the ERO number on the EROSL. If the parts are split between ERO's, fill out a duplicate EROSL with the old and new ERO numbers, NSN, and quantity of items in the ERO bin. Annotate the old ERO with a new ERO number and parts transferred to the new ERO.

2 Ensure that any parts which have been received and could not be installed are placed in the newly assigned ERO's bin.

3 Ensure that an ERO against which Category Code M parts have been received and installed is closed, or the Category Code is changed to "N".

(e) Ensure that all receipts, cancellations, and scrounges have been annotated on the EROSL and that required transactions have been submitted and processed.

(f) Ensure that the status provided is current, acceptable, and understood. Request that the supply officer clarify any status not understood or not sufficiently responsive in accordance with the priority.

(g) Inventory the ERO bins by comparing the EROSL to the materiel/parts in the bin. Annotate the EROSL with any changes required. Ensure that corrective action on changes is accomplished and entered into MIMMS. All of the repair parts in the ERO bin should be reflected as received on the DPR.

(h) Ensure that the DPR is annotated with the current and correct data and reconciled with supply against SASSY output reports. Prepare and submit the required transactions to correct invalid data reflected on the DPR. Figure 3-5 provides a sample supply/maintenance worksheet that may be used for identifying current problems.

(i) Ensure that all open ERO's have been prepared in accordance with TM-4700-15/1.

(4) Biweekly MMO Validation/Reconciliation Responsibilities

(a) The MMO will review the DPR and daily transaction listing (DTL) to identify the following:

1 Recurring errors on input transactions. Trends in input errors should prompt a review of a unit's procedures or discussions with the Maintenance Information System Coordinator Office (MISCO) concerning possible systems problems.

2 Incorrect category, status, or priority assignments.

3 Requisitioning delays. Comparison between the date of the EROSL, document date, and "4 card" run date will reveal any delays in processing requisitions and identify the source of the delay.

b. Validation/Reconciliation Procedures (Non-FMSS-Supported Units)

(1) Frequency. Minimum requirements for daily and biweekly validations are set forth in the following paragraphs.

(2) Daily. A shop/records clerk will accomplish the following:

(a) Ensure that a DD-1348-1/EROSL material record of each ERO/SRO has been completed for all ERO's/SRO's opened the previous day requiring parts.

(b) Ensure that all materiel received from the supply source has been issued to a mechanic or stored in an ERO bin.

(c) For all ERO's/SRO's requiring back-order of parts, ensure that valid requisitions are held by the organic supply source.

(3) Biweekly. Once each two weeks, the commodity manager or shop/maintenance officer or chief will accomplish the following:

(a) Review the daily validation procedures to ensure that they are being done properly.

(b) Ensure that all ERO's/SRO's cite the actual condition and status of the equipment.

(c) Inventory the contents of all ERO bins by comparing the appropriate EROSL/SRO to the quantity on hand. Annotate the EROSL/SRO with any changes and report any requirements to unit supply.

(d) Reconcile each EROSL/SRO with outstanding requisitions held by unit supply to accomplish the following:

- 1 Identify those parts no longer required; cancel requisitions.
- 2 Identify those parts received but not shown as received by unit supply; submit receipt transactions.
- 3 Identify those parts not received but shown as received; submit a new requisition.
- 4 Check the status for each requisition. Request that the supply officer take action on those requisitions which have status that is not understood or responsive.

c. Nonstocked Items

(1) Daily Validation. The shop/records clerk will accomplish the following:

(a) Ensure that a Material Requirements/Issue Document NAVFAC 9-11014/8 and the material record of the SRO have been completed for all SRO's opened the previous day requiring parts.

(b) Ensure that all material received from the designated shop buyer has been issued to a mechanic or stored in an SRO bin.

(c) Ensure that a valid call number/document number can be identified to each NAVFAC 9-11014/8. The shop/records clerk should obtain this from the shop buyer and annotate the shop copy of the NAVFAC 9-11014/8.

(2) Biweekly Validation. Once every two weeks, the shop/maintenance officer/supervisor or chief will accomplish the following:

(a) Review the daily validation procedures to ensure that they are being accomplished properly.

(b) Ensure that all SRO's cite the actual condition of the equipment and the status is correctly reported on the equipment status report.

(c) Inventory the contents of all SRO bins by comparing the appropriate SRO and NAVFAC 9-11014/8 to the quantity on hand. Annotate the SRO with an asterisk for any changes and report any requirements to the designated buyer/section supply as applicable.

(3) Biweekly Reconciliation between the Organization's Supply Section and the Designated Buyer

(a) Each document number assigned to all outstanding NAVFAC 9-11014/8's will be checked to see if they appear on the Unfilled Orders Status Report.

(b) In the event that the buyer has not received the repair part within 15 days of the date the demand was placed on the local vendor, the organizational commander should be made aware of the situation. If the estimated response time of those vendors with whom the buyer is authorized to make purchase is determined unacceptable, the request will be canceled and a DD Form 1149 will be submitted to the Base Contracting and Purchasing Office. Refer to BO 4400.12 for additional details.

d. Reconciliation of Direct Support Stock Control-Stocked items. Reconciliation of direct support stock control (DSSC)-stocked items which were not in stock and of repair parts requisitioned via blanket purchase agreement will be accomplished in accordance with local DSSC established procedures, BO 4400.10 and this paragraph proceeding.

3007. TOOL SETS, CHESTS AND KITS

1. Identification. With the exception of Type 1, SAC 3 items, toolsets, chests and kits will not appear on the Base's Table of Equipment (T/E). Each organizational commander must ensure that all equipment within this category is identified on the Commanding Officer's Non-FMF Allowance List and accounted for on the organization's Consolidated Memorandum Receipt and Mechanized Allowance List.

2. Location. Each set, chest and kit within the organization will be located, and responsibility for accounting and maintaining the toolset, chest or kit will be specified by billet in the organization's shop maintenance SOP.

3. Inventory

a. A complete inventory of all sets, chests and kits will be made using the appropriate SL-3, SL-3 extract, or U.S. Army supply catalog for those items resident in the supply system.

b. For sets, chests and kits procured commercially, a local stock list inventory will be prepared from the accompanying commercial manual.

c. All common or special tools will be consolidated for the purpose of preparing a local stock list for inventory purposes.

d. The three categories of sets, chests and kits and the required intervals are as follows:

(1) All sets, chests, kits and individual hand/portable power tools placed in service will be inventoried and checked for serviceability semiannually.

(2) Additionally sets, chests, kits and individual hand tools issued to an individual on a semipermanent basis will be inventoried upon issue, semiannually and upon recovery. Inventories accomplished for either issue or recovery will satisfy the semiannual inventory requirement.

(3) Sets, chests, kits and individual hand/portable power tools which are not in service will be securely stored and inventoried annually.

Note: These procedures reflect minimum requirements. Commanding officers may specify more frequent inventory intervals within their respective MMSOPS if deemed appropriate.

4. Control

a. TM 4700-15/1 provides an inventory control record. This format will be used by Base units for recording monthly, semiannual and annual inventories. When a set, chest or kit does not have an SL-3, organizational commanders will ensure locally produced inventory forms in this format are used.

b. Sets, chests or kits issued to individuals will be secured when not in the custody of the individual. A duplicate key or a copy of the lock's combination should, when practical, be maintained by the responsible officer.

c. Sets, chests and kits held by an organization for issue to individuals will be maintained in an area secure against pilferage.

d. Daily issue and receipt of sets, chests and kits will be recorded in a log book. Minimum entries to be recorded are as follows: date, description, time out, check-out inventory completed, time in, check-in inventory completed, and signature. The inventory columns will be initialed by the individual checking the set, chest or kit in or out respectively.

e. The remarks section of the inventory form will be annotated with the document number for items which are missing or unserviceable. Each organizational commander must ensure that each missing/unserviceable component is placed on requisition and that the section supply maintains current validation of these documents.

f. Sets, chests and kits held in toolrooms from which tools are issued temporarily to mechanics on a recurring basis will be inventoried quarterly or more frequently as dictated by unit policy, by an individual, other than the toolroom custodian, designated by the responsible officer.

g. Annual inventories of sets, chests and kits not currently in use will be conducted during the regular annual physical inventory of property. The original of the inventory will be retained in the organization's files and a copy placed in the set, chest or kit. The set, chest or kit will then be banded or locked to preclude unauthorized use of the tools contained therein.

h. Inventories will be maintained on hand for one year and contain the date of the inventory, the signature of the individual conducting the inventory and the signature of the individual supervising the inventory. Personnel supervising the inventory will ensure that during the inventory the tools are inspected for serviceability and safety hazards and that required maintenance is conducted.

5. Special Sets, Chests, Kits, Repair Parts/Components Requirements. Locally authorized sets, chests, kits and repair parts/components which the commanding

officer authorized will be accounted for on the Commanding Officer's Non-FMF Allowance List (T/E) regardless of dollar value. Requests for local TAMCN's will be submitted to the SMU via the Commanding General, Marine Corps Base, Camp Lejeune, (AC/S, Logistics). The request will be accompanied with the locally authorized SL-3 Extract. The commanding officer may vary or change the allowances of the "consist of list" without approval from this Headquarters once the allowance for the kit is established. Any changes authorized must be retained with the set, chest or kit and signed by the commanding officer.

6. Journeyman Tools. The requirement for journeyman civilians to provide the basic tools of their trade is explained in MCO P11000.7 and BO 12594.2.

3008. FISCAL SUPPORT

1. General. Adequate fiscal support is vital to the maintenance effort. Funds are required to purchase required parts, materials, and/or services. Failure to allocate sufficient funds for maintenance precludes the accomplishment of required preventive and corrective maintenance services resulting in increased deadline of equipment and, ultimately, the inability of the activity to accomplish its assigned mission.

2. Budgeting of Maintenance. On a biannual schedule, Base organizations are required to develop their budget estimates for their organization for the current fiscal year, the coming budget year, the budget year plus one and the budget year plus two. On an annual basis, the organizations are required to review and modify budget estimates to accommodate changes to mission goals and accomplishments. Maintenance managers will participate in the development of the budget and ensure that the requirement for maintenance related funds is included in the operations and maintenance budget estimates. Data required to support estimated maintenance expenditures can be obtained by reviewing equipment records and supply records to determine past expenditures for maintenance services and parts. The expenditures can then be projected into future operations requirements by taking into consideration any changes to the unit mission and to the equipment to be supported.

3. Utilization of Maintenance Funds. The expenditures of funds allocated for equipment maintenance will be monitored closely by maintenance management personnel to ensure their effective utilization. This can be accomplished by:

a. Providing continuing attention and emphasis to the accomplishment of preventive maintenance to preclude the necessity for more costly corrective maintenance.

b. Reviewing maintenance procedures to ensure economy of operation.

c. Reviewing equipment records to detect repeated failures. Repetitious failures may be indicative of improper or incomplete maintenance. If the same problem recurs frequently and is corrected by replacing the same part each time, the indication is that maintenance personnel are treating the symptom rather than finding the true underlying cause of the fault.

d. Ensuring compliance with BO P7000.1 (SOP for Financial Management).

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

UNITED STATES MARINE CORPS
UNIT
Marine Corps Base
Camp Lejeune, NC 28542

SSIC
ID
(Date)

From: Commanding Officer
To: Commanding General, Marine Corps Base, Camp Lejeune
(Attn: AC/S Logistics, MMO)
Subj: REQUEST FOR AUTHORIZATION FOR CANNIBALIZATION/SELECTIVE INTERCHANGE
Ref: (a) BO P4790.1

1. Per the reference, it is requested that the cannibalization/selective interchange indicated below be authorized.

UNIT	EVAC					OWNING		DATE
<u>ERO#</u>	<u>ERO#</u>	<u>NOMEN</u>	<u>SERIAL #</u>	<u>TAMCN</u>	<u>ID #</u>	<u>UIC</u>	<u>PRI</u>	<u>RDD</u> <u>EVAC</u>

Repair parts to be exchanged:

ITEM

<u>NOMEN</u>	<u>NSN</u>	<u>PRI</u>	<u>DOC#</u>	<u>STATUS</u>	DATE <u>SERIAL #</u>	ITEM <u>FROM</u>	SERIAL <u># TO</u>
--------------	------------	------------	-------------	---------------	-------------------------	---------------------	-----------------------

a. (Give an explanation of what repair parts are to be exchanged between what specific equipment).

b. (Give the reason why the parts exchange is required indicating that an operational commitment is imminent and that the required repair parts will not be received prior to the RDD).

2. The point of contact for this exchange is _____ extension ____.

/s/_____

(Commanding Officer)

Figure 3-1.--Sample Letter Requesting Authorization for Cannibalization/Selective Interchange.

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

UNITED STATES MARINE CORPS
UNIT
Marine Corps Base
Camp Lejeune, NC 28542

SSIC
ID
(DATE)

From: Commanding Officer
To: Officer in Charge, Maintenance Float, 2d Supply Battalion, 2d Force
Service Support Group, Camp Lejeune

Subj: PERSONNEL AUTHORIZED TO RECEIPT FOR MATERIAL/RECONCILE

Ref: (a) BO P4790.1
(b) FSSGO 4400.20_ *
(c) FSSGO P4790.4_

1. Per instructions contained in the references, the following personnel are authorized to receipt for equipment and reconcile with the Maintenance Float.

<u>NAME</u>	<u>GRADE</u>	<u>SSN</u>	<u>SAMPLE SIGNATURE</u>
-------------	--------------	------------	-------------------------

2. All previous letters of authorization are hereby cancelled.

/s/ _____
(Commanding Officer)

Figure 3-2.--Sample Letter Personnel Authorized to
Receipt for Material Reconcile With Maintenance Float.

STANDING OPERATING PROCEDURES FOR MAINTENANCE MANAGEMENT

MAINTENANCE SUPPLY WORKSHEET

SHOP_____ PREPARED BY _____ DATE_____

SUPPLY: RECEIVED BY_____ DATE_____ WORKED BY _____ DATE_____

RETURNED TO MAINTENANCE SHOP _____ DATE_____

ERO NUMBER	DOCUMENT NUMBER	NSN/PART QTY	ACTION REQUESTED BY MAINTENANCE	ACTION NUMBER BY SUPPLY

Figure 3-3.--Sample Maintenance/Supply Worksheet.